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The Limoniinae (Diptera: Tipulidae) of Australia

- I. Introduction, Methods, Identification
- II.The genus Molophilus Curtis



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The Limoniinae (Diptera: Tipulidae) of Australia

Introduction, Methods, Identification

G.Theischinger, Engadine

Introduction

A review of the Tipulidae of Australia was initiated by ALEXANDER (1932) but did not proceed very far. Another review of the Australian Tipulidae was begun by DOBROTWORSKY who in a series of papers (DOBROTWORSKY 1968—1974) revised the Australian Tipulinae and planned, but never came, to treat the Limoniinae and Cylindrotominae in a similar way.

In recent catalogs for the Australian and Oceanian regions Oosterbroek & Jonas (1986) and Oosterbroek (1989) agreed in listing 598 species group taxa of Limoniinae from Australia. The majority of these were described by only two workers, namely Skuse (1890,

1896) and ALEXANDER (numerous papers between 1921 and 1978), whereas only a few species were contributed by other authors. Thirty-three taxa of the species group of the genus *Molophilus* Curtis, recently described by Theischinger (1988a, 1988b), were not included in the above catalogs.

Therefore, at the present, the Australian limoniine fauna includes about 630 named taxa of the species group.

In spite of the small number of workers, however, reliable specific identifications of Australian Limoniinae were, without consulting type material, hitherto impossible. This was mainly due to the lack of illustrations,

insufficient detail in the few illustrations available and the lack of any summarizing or comprehensive treatments. Particularly the loss of types and the loss of taxonomically important portions of the types, combined with the availability of many undescribed species, made any work difficult.

Under the title "The Limoniinae (Diptera: Tipulidae) of Australia", a series of papers in "Stapfia", revising genus by genus, all species of Australian Limoniinae, is now intended to present the best possible specific interpretations, to provide the first means of identification accessible to specialist and nonspecialist and to supply important and useful information on distributions, biology and affinities.

Methods

Generally, all genera are treated the same way. Following abstract and introduction, the

methods particularly adopted in the group are specified, and synonymy, type species and genus diagnosis, with illustration of the descriptive terminology, are given. Then, a key is presented to subgenera and well defineable species groups. The subgenera, and within the subgenera, the well defineable species groups are then treated in alphabetical order. For each collective taxon, the species are listed in alphabetical order, followed by their actual treatment, the order of which is based on similarity in the male hypopygium. The illustrations which are presented collectively in the same order at the end of the single papers (generic revisions) make them more useful for comparisons and identifications. For each previously described species, a brief synonymic list is given, and collecting data, repository, consultation and condition of the primary types are recorded. Following this, all published collecting localities and available illustrations are listed. Then



characters considered useful for identifications and diagnostic features are presented. Instead of describing complex patterns or structures in detail (as in wings, male hypopygium etc.) only references are made to figures. Remarks are made on the position of the species within the next higher collective group, on the closest allies and on some previously published information. Then a list of new records including the repositories of the material is given, and the general distribution is lined out. An edited original or best available description of the male hypopygium is given only for species for which a satisfactory illustration of this portion is not available, whereas the complete original description is given for species that cannot be interpreted at all (nomina dubia) and for species described from the female only. For each species described as new, a brief description of colouration and size, (a) diagnostic illustration(s), a verbal diagnosis, a list of the material studied, the general distribution and a derivatio nominis are presented. The distributions have been related to regions as recognized on broadly ecological grounds but given arbitrary boundaries for practical reasons, as outlined by WATSON (1974) (see Map of Australia).

The illustrations of the male hypopygium are, if not stated otherwise, from specimens cleared in KOH and displayed in glycerol. The names proposed for species are, if not stated otherwise, Australian Aboriginal words referring to some characters of the species; they are to be regarded as undeclinable nouns in apposition to the generic name.

Taxonomic terms are abbreviated as follows:

comb. nov.	or c.n.	new combination
gen. nov.	or g. n.	new genus
nom. nov.	or n. n.	new name
spec. nov.	or sp. n.	new species
stat. nov.	or st. n.	new status
subgen. nov	. or sg. n.	new subgenus
subspec. no	v. or ssp. n.	new subspecies

After all genera have been revised, the work will be updated with a key to the genera and an alphabetical register, including all valid names,

synonyms and homonyms from this series of papers, with reference to page of treatment and figures.

Identification of species

For identification, male specimens (specific identifications of the females are in most groups at this stage impossible) have to be cleared in KOH and set up in glycerol in a position similar to that displayed in the illustrations of the particular genus. After keying out subgenus or species group in larger genera or straight away in smaller genera, the specimens should be compared carefully to all members illustrated for the particular taxon. After picking out the most similar species, the remarks presented under this species should be read, and the specimens should once again be checked carefully against descriptions and illustrations of species said to be similar, before a decision is made.

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The Limoniinae (Diptera: Tipulidae) of Australia

The genus Molophilus Curtis

G. Theischinger, Engadine

Abstract

The species of Molophilus Curtis known from Australia are reviewed. Two new subgenera, Diplomolophilus and Onychomolophilus, are established. 76 species are described as new and 15 names of the species group are placed in synonymy. A new name, M. tenuior, is proposed for M. tenuissimus Theischinger, which is a junior homonym of M. tenuissimus Alexander. Diagnostic characters and distributional data are presented for all species. The Australian Molophilus fauna, at this stage, comprises 258 taxa of the species group. Three of these are definitely regarded as nomina dubia. For 16 species diagnostic illustrations cannot be given as material is not available.

Introduction

Molophilus Curtis is by far the largest tipulid genus in Australia. 161 taxa of the species group, described by Skuse (1890) and by Alexander (1921, 1922, 1924, 1927a, 1927b, 1927c, 1927d, 1928, 1929a, 1930, 1931, 1934, 1942, 1944, 1978) were considered as valid by Oosterbroek & Jonas (1986) and by Oosterbroek & Jonas (1986) and by Oosterbroek (1989). Whereas Alexander (1929b) spent considerable effort depicting most of Skuse's 15 species, he illustrated only one out of about ten of his own species. As the only reliable and useful characters for the separation of most Australian Molophilus species seem to

lie in the male hypopygium, the lack of illustrations of this structure, together with the great number of different forms, made it impossible for anyone to identify material from Australia even though Alexander's descriptions are excellent.

In order to improve this situation, taxonomic studies on Australian *Molophilus* were started by clarifying the identities of the species of two geographic regions (Theischinger 1988a) and of one particular taxonomic unit (Theischinger 1988b). After that, the consultation of all available primary types and original descriptions was completed, and most available paratypes

and specimens identified by C. P. Alexander were examined. This and the study of large numbers of more recently collected specimens enabled me to illustrate most of the remaining species, to clarify their identities and to add considerable information on their distributions. As a result this comprehensive treatment is presented. However, there cannot be any doubt that many more species of *Molophilus* will be discovered in Australia by more intensive and extensive collecting.

Descriptive terminology

This is presented and explained by illustrations under each supraspecific taxon (see there).

Methods

Much as pointed out in the introductive paper to this series (Theischinger 1992).

Addition. The male hypopygium of the species of *Molophilus* treated in this paper is naturally rotated through 180°. The figures show the hypopygium in dorsal view, if not indicated otherwise. In the descriptions and figure captions terms as dorsal or ventral relate to the hypopygium only, and not to the entire insect.

Identifications

As pointed out in the introductive paper to this series (Theischinger 1992).

Acknowledgements

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Abbreviations

Apart from the abbreviations for taxonomic terms and geographical regions of Australia, both listed in the introductive paper to this series (Theischinger 1992), the following abbreviations are used:

a) for authors

ALEX. = ALEXANDER

THEI. = THEISCHINGER

b) for institutions and collections

AM = Australian Museum, Sydney

ANIC = Australian National Insect Collection, Canberra

BPBM = Bishop Museum, Honolulu, U.S.A.

GT = Collection Günther Theischinger

MST = Naturhistoriske Riksmuseum, Stockholm, Sweden

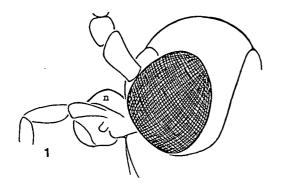
MV = Museum of Victoria, Melbourne

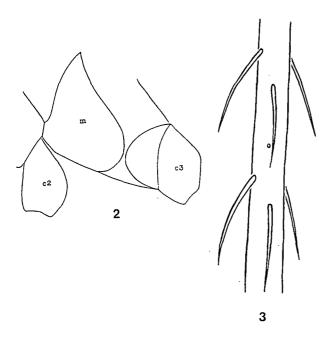
NMNH = National Museum of Natural History, Washington D. C., U.S.A.

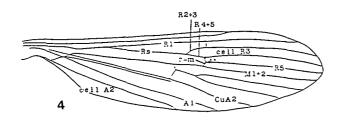
QM = Queensland Museum, Brisbane

WAM = Western Australian Museum, Perth

c) others







Figs 1-4. *Molophilus* species: 1, head, lateral aspect; 2, posteroventral portion of thorax, lateral aspect; 3, part of mesotibia; 4, wing.

Abbreviations: c2 = mesocoxa; c3 = metacoxa; m = meron; n = nasus.

Systematics

Genus Molophilus Curtis (Figs 1—4)

Molophilus Curtis, British Entomology 10: 444 (1833).

Type species. *Molophilus brevipennis* Curtis 1833, by original designation.

Molophilus Curtis ist a genus of the tribus Eriopterini (subfamily Limoniinae, family Tipulidae). The combination of the following characters is considered diagnostic for Molophilus in Australia.

Definition. Rostrum short, little developed. Meron between mesocoxa and metacoxa extensive, seen from lateral aspect larger than mesocoxa. Setae of legs simple. R1 longer than 2/3 wing length; Rs ending in cell R3, with veins R2+3 and R4+5 distinct; vein R5 not fused with vein M1+2; r-m present; veins CuA2 and A1 not fused distally; cell A2 long and wide.

Habitat of larvae (according to ALEXANDER 1931b). In or beneath wet to saturated mats or cushions of mosses and liver-worts, growing on earth or rocks, generally near streams. Sandy, gravelly, or loamy soil, with slight humus, at margins of streams or ponds. Rich organic earth or mud, as at margins of rills, streams, lakes or other bodies of water; in swamps or marshes; in leaf mold or drift at stream margins; wet spots in woods. Beneath leaf-mold in rich, moist to saturated humus soil in woods.

Distribution (according to ALEXANDER 1967). All zoogeograhic regions including Madagascar and New Zealand. Greatest concentration of species in the southern hemisphere especially in Australasia (Australia, New Zealand, New Guinea) and southern South America. Numerous species in the Holarctic and Oriental but relatively few in the Ethiopian region.

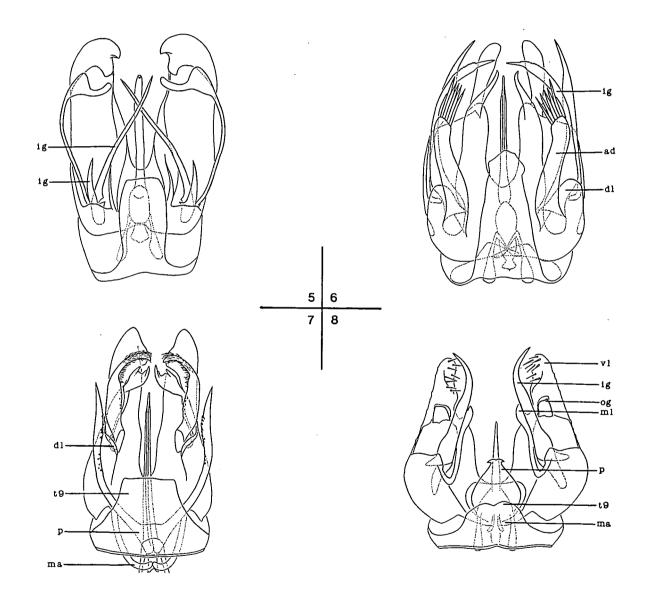
The subgenera of *Molophilus* Curtis in Australia:

Austromolophilus Thei.
Diplomolophilus sg. n.
Lyriomolophilus Thei.
Molophilus Curtis

Onychomolophilus sg. n. Superbomolophilus Thei.

Key to the subgenera and species groups of Australian *Molophilus* as recognized in this paper (Figs 5—12)

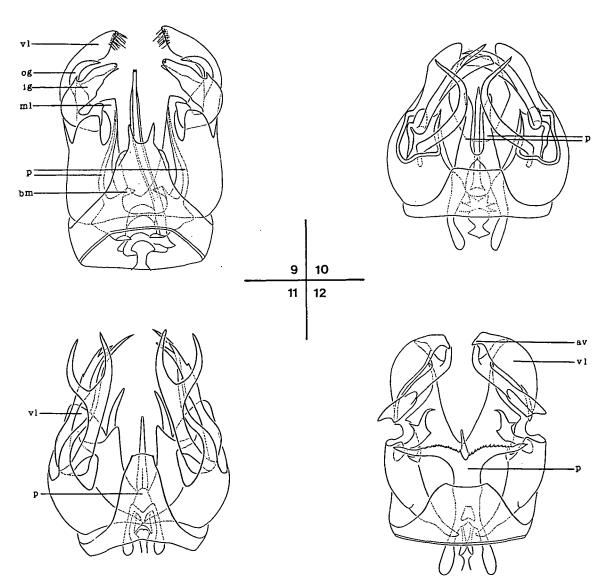
- Dorsal lobe of gonocoxite without dorsal appendage (Figs 7—12).....3
- - Parameres not lyriform; mesodorsal apodeme of gonocoxite not reaching base of tergite 9 (Figs 8-12).....4



Figs 5-12. Male hypopygium (dorsal aspect) of Molophilus species, representing the subgenera and species groups of Australian Molophilus as recognized in this paper: 5, M. (Austromolophilus) coraperena sp. n.; 6, M. (Diplomolophilus) mongana sp. n.; 7, M. (Lyriomolophilus) leonardi sp. n.; 8, M. (Onychomolophilus) piggibilla sp. n.; 9, M. (Superbomolophilus) cooloola sp. n.; 10, M. (Molophilus) mimicus ALEX. (= M. flavoannulatus group); 11, M. (Molophilus) karta sp. n. (= M. gracilis group); 12, M. (Molophilus) mawiliri sp. n. (= M. plagiatus group).

.....Superbomolophilus

- Parameres medially almost completely divided with the two parts not connected to mesal face of gonocoxites (Fig. 10), or fused (Figs 11,12)...........Molophilus, 6
- Parameres fused (Figs 11,12)7



Abbreviations: ad = appendix of dorsal lobe of gonocoxite; av = apical beak of ventral lobe of gonocoxite; bm = base of mesal lobe of gonocoxite; dl = dorsal lobe of gonocoxite; ig = inner gonostylus; ma = mesodorsal apodeme of gonocoxite; ml = mesal lobe of gonocoxite; og = outer gonostylus; p = parameres; t9 = tergite 9; vl = ventral lobe of gonocoxite.

Subgenus Austromolophilus Theischinger (Fig. 13)

Molophilus pervagatus group, sensu Alexander (1927a, 1929b).

Austromolophilus Theischinger, Stapfia 17: 165 (1988); as subgenus of Molophilus Curtis.

Type species: *Molophilus pervagatus* Skuse 1890, by original designation.

Definition. Male hypopygium with posterior margin of tergite 9 not strongly sclerotized or armed. Dorsal lobe of gonocoxite small and without a dorsal appendage, mesal lobe not developed and ventral lobe rather long, moderately stout, with apex pointing mesad, hook-shaped or not hook-shaped; mesodorsal apodeme of gonocoxite not reaching base of tergite 9. Outer gonostylus of normal size and not originationg far from base of inner gonostylus which consists of two separate branches. Parameres fused.

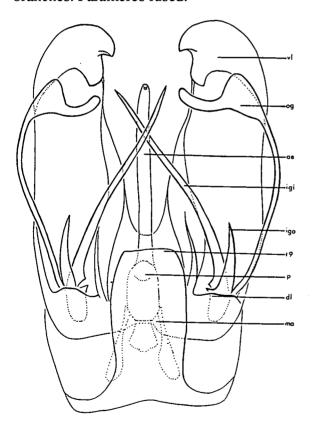


Fig. 13. Molophilus (Austromolophilus) coraperena sp. n., male hypopygium, dorsal aspect. Abbreviations: ae = aedeagus; dl = dorsal lobe of gonocoxite; igi = inner branch of inner gonostylus; igo = outer branch of inner gonostylus; ma = mesodorsal apodeme of gonocoxite; og = outer gonostylus; p = parameres; t9 = tergite 9; vl = ventral lobe of gonocoxite.

Remarks. Austromolophilus was considered to be endemic for Australia (Theischinger 1988a). Recent studies of Molophilus from New Guinea, however, showed that Molophilus archboldeanus Alexander known from New Guinea only, belongs to Austromolophilus. Distribution. Australia (eastern and southwestern); New Guinea.

The Australian species of *Molophilus* (Austromolophilus) (in alphabetical order):

acutistylus ALEX. aplecta ALEX. asthenes sp. n. benesignatus Thei. binyana sp. n. burraganee sp. n. cassisi Thei. chrysopterus ALEX. commoni Thei. coraperena sp. n. cranstoni sp. n. denise Thei. dindi sp. n. diversistylus ALEX. echidna sp. n. eugonia ALEX. expansistylus ALEX. exquisitus ALEX. flexilis ALEX. fragillimus Thei. gracillimus ALEX. gweeon sp. n. heroni ALEX. illperippa sp. n. incomptus ALEX. kirra sp. n. koorang sp. n. lea sp. n. loratus ALEX. mattfulleri sp. n. nurawordubununa sp. n. palpera sp. n. pervagatus Skuse phyllis ALEX. picticeps ALEX. pictipes ALEX. pinta sp. n. pulchripes Skuse

pusio Alex.
setuliferus Alex.
subasper Alex.
subhastatus Alex.
tenuior n. n.
tersus Alex.
trianguliferus Alex.
uncinatus Thei.
uptoni Thei.
warriuka sp. n.
yandala sp. n.

Molophilus (Austromolophilus) acutistylus Alexander (Figs 21, 22)

Molophilus acutistylus Alexander; Ann. Mag. nat. Hist. (10) 3: 343 (1929).

Molophilus decinctus Alexander, Ann. Mag. nat. Hist (10) 5: 387 (1930).

Molophilus trifasciolatus Alexander, Proc. Linn. Soc. N. S. W. 59: 188 (1934).

Primary types. Holotype O of M. acutistylus Alexander: Victoria, Cockatoo, 14-19.5.1927, G. F. Hill (NMNH); seen. Holotype O of M. decinctus Alexander: Victoria, Bogong High Plains, 5600—6000 ft, Jan. 1928, F. E. Wilson (MV); seen; only pin and label left, specimen lost. Holotype O of M. trifasciolatus Alexander: New South Wales, Megalong Valley, Blue Mts, 20-30. 10. 1930, F. E. Wilson (MV); seen; genitalia missing.

Published records: New South Wales: Megalong Valley, Blue Mts (ALEXANDER 1934: 189). Victoria: Bogong High Plains, 5600—6000 ft (ALEXANDER 1930: 388); Cockatoo (ALEXANDER 1929a: 344).

Previous illustrations. Alexander 1934: Fig. 12.

Genitalia. Male hypopygium, Figs 21, 22.

Remarks. Similar to M. chrysopterus ALEX.

New records. New South Wales: Bendora, A. C. T. (ANIC); 3 mi. S of Monga (ANIC). Victoria: Bogong High Plains (ANIC); Mt Baw Baw, 3100 ft (ANIC); Walhalla (NMNH). Tasmania: Mt Barrow, 2500 ft (ANIC). Distribution. New South Wales (SEN), Victoria, Tasmania.

Molophilus (Austromolophilus) chrysopterus Alexander (Fig. 23)

Molophilus chrysopterus Alexander, Ann. Mag. nat. Hist. (10) 5: 386 (1930).

Primary type. Holotype of: Victoria, Bogong High Plains, 5600—6000 ft, Jan. 1928, F. E. Wilson (MV); seen.

Published records. Victoria: Bogong High Plains, 5600—6000 ft (ALEXANDER 1930: 387). Genitalia. Male hypopygium, Fig. 23.

Remarks. Similar to M. acutistylus ALEX.

New records. Victoria: Bogong High Plains (ANIC); Donna Buang, Warburton, 3000—4000 ft (NMNH); Mt Baw Baw, 3600—3800 ft (ANIC); Mt Donna Buang, 3800—4000 ft (NMNH).

Distribution. Victoria.

Molophilus (Austromolophilus) flexilis Alex-Ander (Fig. 24)

Molophilus flexilis Alexander, Ann. Mag. nat. Hist (9) 20: 363 (1927).

Primary type. Holotype of: Tasmania, Hobart, 8. 11. 1922, A. Tonnoir (ANIC); seen.

Published records. Tasmania: Burnie; Hobart; Launceston (all ALEXANDER 1927d: 364).

Genitalia. Male hypopygium, Fig. 24.

Remarks. Similar to M. illperippa sp. n.

New records. Victoria: 5 mi. S of Barramunga (ANIC); Barwon (ANIC); Ben Cairn (ANIC); Buckland's, Gippsland (ANIC); Cann River (ANIC); Croydon 400 ft (NMNH); 1 mi S of Deane's Marsh (ANIC); Delleys Dell, Grampians (MV); Eltham (NMNH); Ferntree Gully (NMNH); Grampians (ANIC, NMNH); Halls Gap, Grampians (MV); Lorne (ANIC); Maroondah (ANIC); Mt William (ANIC); N Grampians (ANIC); Otways, Benwerrim (ANIC); Ravenswood (ANIC); Ringwood (NMNH); Warburton, 750 ft (NMNH). South Australia: Aldgate (NMNH).

Distribution. Victoria, Tasmania, South Australia (SES).

Molophilus (Austromolophilus) illperippa spec. nov. (Fig. 25)

Description(O). Colouration: largely dark greyish brown; headdark grey, antennae greyish brown; scutellum dull yellow; wings pale brownish grey, halteres dull yellow to grey; legs greyish yellow to greyish brown.

Dimensions. Wing length 4,9 mm.

Genitalia. Hypopygium, Fig. 25.

Remarks. Most similar to *M. flexilis* ALEX. Diagnostic for *M. illperippa* are the basally wide, distally thin, inner branch and the slender, distally serrate, outer branch of the inner gonostylus.

Material examined. Holotype O: New South Wales, Wentworth Falls, 26. 6. 1966, N. Dobrotworsky (ANIC).

Distribution. New South Wales (SEN).

Name. Illperippa (Australian Aboriginal word for "leaf") refers to the shape of the inner branch of the inner gonostylus.

Molophilus (Austromolophilus) koorang spec. nov. (Fig. 27)

Description (σ). Colouration: largely yellowish to greyish brown; head and antennae brownish grey; wings greyish yellow; halteres pale yellow; legs yellowish to brownish grey.

Dimension. Wing length 3,3—3,4 mm.

Genitalia. Hypopygium, Fig. 27.

Remarks. Most similar to *M. aplecta* ALEX. Diagnostic for *M. koorang* is the snake—like slenderness of both branches of the inner gonostylus.

Material examined. Holotype of: Queensland, 5 mi. S Kenilworth, rainforest, 7. 4. 1967, N. Dobrotworsky (ANIC). Paratypes: Queensland: 2 of, same data as holotype (ANIC, GT).

Distribution. Queensland (SEQ).

Name. Koorang (Australian Aboriginal word for "snake") refers to the shape of both branches of the inner gonostylus.

Molophilus (Austromolophilus) aplecta ALEX-ANDER (Fig. 26)

Molophilus aplecta Alexander, Ann. Mag. nat. Hist. (10) 3: 339 (1929).

Primary type. Holotype O: New South Wales, Brooklana, eastern Dorrigo, ca. 2000 ft, 6. 5. 1928, W. Heron (NMNH); seen.

Published records: New South Wales: Brooklana, eastern Dorrigo, ca. 2000 ft (ALEXANDER 1929a: 340).

Genitalia. Male hypopygium, Fig. 26.

Remarks. Very similar to M. koorang sp. n.

New records. Queensland: Cunninghams Gap, 2500 ft (ANIC). New South Wales: eastern Dorrigo (NMNH); Mt Keira (GT); upper Allyn River (ANIC).

Distribution. Queensland (SEQ), New South Wales (NEN, SEN).

Molophilus (Austromolophilus) asthenes spec. nov. (Fig. 28)

Description (O). Colouration: largely yellowish to greyish brown; head brownish grey, antennae yellowish to pale greyish brown; wings brownish to greyish yellow, halteres whitish yellow; coxae and trochanters greyish yellow, remainder of legs missing.

Dimensions. Wing length 4,0 mm.

Genitalia. Hypopygium, Fig. 28.

Remarks. Similar to *M. commoni* Thei. and *M. tenuior* n. n. Diagnostic for *M. asthenes* are the two equally thin branches of the inner gonostylus.

Material examined. Holotype O: New South Wales, Macquarie Pass, 13. 10. 1986, G. Theischinger and L. Müller (ANIC).

Distribution. New South Wales (SEN).

Name. Asthenes (Greek word for "weak") refers to the weak condition of both branches of the inner gonostyius.

Molophilus (Austromolophilus) tenuior nom. nov. (Fig. 29)

Molophilus (Austromolophilus) tenuissimus Theischinger, Stapfia 17: 172 (1988); preoccupied by Molophilus tenuissimus ALEXANDER 1923.

Primary type. Holotype of: Western Australia, 8 mi. N of Bunbury, 1. 10. 1970, D. H. Colless (ANIC); seen.

Published records. Western Australia: 8 mi N of Bunbury (Theischinger 1988a: 172).

Previous illustrations. Theischinger 1988a: Fig.9.

Genitalia. Male hypopygium, Fig. 29.

Remarks. Similar to *M. asthenes* sp. n. and *M. commoni* Thei.

New records. Victoria: Cape Otway (MV). Distribution. Victoria, Western Australia (SWA).

Molophilus (Austromolophilus) commoni Theischinger (Fig. 30)

Molophilus (Austromolophilus) commoni Theischinger, Stapfia 17: 168 (1988).

Primary type. Holotype O: Queensland, 9 mi. SSE of Ravenshoe, 2750 ft, 21. 4. 1969, I. F. B. Common and M. S. Upton (ANIC); seen. Published records. Queensland: 9 mi. SSE of Ravenshoe, 2750 ft (Theischinger 1988a: 168). Previous illustrations. Theischinger 1988a: Fig. 3.

Genitalia. Male hypopygium, Fig. 30.

Remarks. Similar to *M. asthenes* sp. n. and *M. tenuior* n. n.

New records. None.

Distribution. Queensland (NEQ).

Molophilus (Austromolophilus) burraganee spec. nov. (Fig. 31)

Description (O). Colouration: largely greyish brown; wings yellowish to pale greyish brown with darker patches, halteres greyish yellow; legs dull greyish yellow with two darker rings in distal half of femur, and with dark apex of tibia; protibia in addition with dark subbasal ring.

Dimensions. Wing length 3,5—4,2 mm. Genitalia. Hypopygium, Fig. 31.

Remarks. Similar to M. commoni Thei. and M. loratus Alex., possibly also to M. picticeps Alex. and M. pictipes Alex. Diagnostic for M. burraganee is the great length and slenderness of both branches of the inner gonostylus.

Material examined. Holotype O: Queensland, Mt Glorious, rain forest, 24-28. 2. 1961, L. and M. Gressitt (ANIC). Paratypes: Queensland: 7 O, same data as holotype (BPBM, GT); 4 O, Mt Glorious, 600 m, rain forest, malaise trap, 28. 2. -6. 3. 1961, J. L. and M. Gressitt (BPBM); 2 O, Tulley Falls, light trap, 10. 3. 1956, J. L. Gressitt (BPBM).

Distribution. Queensland (NEQ, SEQ).

Name. Burraganee (Australian Aboriginal word for "beomerang") refers to the slightly angulated outer branch of the inner gonostylus.

Molophilus (Austromolophilus) loratus Alex-Ander (Fig. 32)

Molophilus loratus Alexander, Ann. Mag. nat. Hist. (10) 3: 341 (1929).

Primary type. Holotype of: Victoria, Ringwood, ca. 400 ft, 4. 9. 1927, C. Barret (NMNH); seen. Published records. Victoria: Bayswater; Ringwood, ca. 400 ft (both ALEXANDER 1929a: 343).

Genitalia. Male hypopygium, Fig. 32.

Remarks. Similar to *M. burraganee* sp. n. and *M. commoni* Thei., possibly also to *M. picticeps* ALEX. and *M. pictipes* ALEX.

New records. New South Wales: 9 km SE of Batemans Bay (ANIC); Black Mtn, A. C. T. (ANIC); 4 mi. E of Nimmitabel (ANIC). Victoria: Cann River (ANIC); Devon North (ANIC); Ferntree Gully (NMNH); Frankston (NMNH); Grampians (NMNH); Lilydale (ANIC); Lorne, Deane's Marsh Road (MV); Maroondah (ANIC); 5 West Orbost (ANIC); Ringwood (NMNH); Springvale (NMNH); 9 mi. E of Stratford (ANIC); Swan Reach (ANIC); Trafalgar (NMNH); Yarram (NMNH). South Australia: Mt Crawford State Forest (MV). Distribution. New South Wales (SEN), Victoria, South Australia (SES).

Molophilus (Austromolophilus) picticeps Alexander (Fig. 33)

Molophilus picticeps ALEXANDER, Ann. Mag. nat. Hist. (9) 20: 353 (1927).

Primary type. Holotype O: Tasmania, Burnie, 24.10.1922, A. Tonnoir (ANIC); seen; genitalia in poor condition.

Published records. Tasmania: Burnie (ALEXANDER 1927d: 354).

Genitalia. Male hypopygium (Fig. 33) with the gonocoxites elongate, the outer gonostylus lying far distad, the gonocoxite beyond it restricted, produced mesad into a weak unchitinized beak, this region of the style with numerous erect delicate setae. Outer gonostylus simple, the base broad, the apical portion with a short curved neck, the head oval. Outer branch of inner gonostylus a long, simple, gently-curved, black rod that narrows gradually to the acute point, the distal third provided with delicate subappressed setulae along the outer face, inner branch of inner gonostylus only a trifle shorter, very slender and pale, the distal portion almost filiform, the apex very feebly expanded. Tergite 9 relatively narrow, setiferous. Aedeagus large and concpicuous.

Remarks. Probably most similar to *M. pictipes* ALEX. Fresh material is not available.

New records. None.

Distribution. Tasmania.

Molophilus (Austromolophilus) pictipes ALEX-ANDER (Fig. 34)

Molophilus pictipes Alexander, Ann. Mag. nat. Hist. (9) 20: 354 (1927).

Primary type. Holotype O: Tasmania, St Patrick River, 4. 11. 1922, A. Tonnoir (ANIC); seen; genitalia in poor condition.

Published records. Tasmania: St Patrick River (ALEXANDER 1927d: 356).

Genitalia. Male hypopygium (Fig. 34) of the same general structure as in *M. picticeps* ALEX-ANDER (gonocoxite not chitinized at apex; outer gonostylus simple; both branches of inner gonostylus simple, slender, pointed at tips), differing conspicuously in the structure of the styli. Gonocoxite only vaguely produced at

apex, here very densely set with yellow setae. Outer gonostylus with the oval head smaller. Outer branch of inner gonostylus rather stout, the surface with triangular appressed denticles on the outer two-thirds, giving the style a feebly roughened appearance; apex stout, but acute; inner branch of inner gonostylus subequal in length and only a little more slender, the surface reticulated with eleongate-oval plate-like areas, the apex more acute.

Remarks. Probably most similar to M. picticeps ALEX. Fresh material is not available.

New records. None.

Distribution. Tasmania.

Molophilus (Austromolophilus) coraperena spec. nov. (Fig. 35)

Description(O). Colouration: largely reddish to greyish brown; head dark brown, antennae pale greyish brown; wings pale greyish to reddish brown with darker patches; legs yellowish to pale greyish brown, femora with two darker rings in distal half, tibiae with dark apex.

Dimensions. Wing length 3,6—4,2 mm.

Genitalia. Hypopygium, Fig. 35.

Remarks. Similar to M. dindi sp. n., M. exquisitus ALEX., M. gracillimus ALEX., M. subasper ALEX. and M. tersus ALEX. Diagnostic for M. coraperena is the great difference in length of the two branches of the inner gonostylus.

Material examined. Holotype O: Queensland, rain forest, 24—28. 2. 1961, J. L. and M. Gressitt (ANIC). Paratypes: Queensland: 11 O, same data as holotype (ANIC, BPBM, GT); 4 O, Mt Glorious, 600 m, rain forest, 28. 2.—6. 3. 1961, malaise trap, J. L. and M. Gressitt (BPBM).

Distribution. Queensland (SEQ).

Name. Coraperena (Australian Aboriginal word for "a straight line") refers to the almost straight inner branch of the inner gonostylus.

Molophilus (Austromolophilus) dindi spec. nov. (Fig. 36)

Description(O). Colouration: largely yellowish

to greyish brown; head brownish grey, antennae yellowish to brownish grey; wings pale yellowish grey with two slightly darker patches, halteres pale yellowish grey; coxae and trochanters pale to dull yellow; fore leg with femur and tibia largely pale to dull yellow, one ring in distal half and apex of femur and base and apex of tibia dark brownish grey, and tarsal segments brownish grey; other legs missing. Dimensions. Wing length 3,7 mm.

Genitalia. Hypopygium, Fig. 36.

Remarks. Similar to M. coraperena sp. n., M. exquisitus ALEX., M. subasper ALEX. and M. tersus ALEX. Diagnostic for M. dindi is the mesally serrate and subapically spinose outer branch of the inner gonostylus.

Material examined. Holotype O: New South Wales, Point Lookout, 6. 2. 1988, G. Theischinger (ANIC).

Distribution. New South Wales (NEN).

Name. Dindi (Australian Aboriginal word for "pointed stick") refers to the pointed outer branch of the inner gonostylus.

Molophilus (Austromolophilus) exquisitus Alexander (Fig. 37)

Molophilus exquisitus Alexander, Ann. Mag. nat. Hist. (10) 3: 340 (1929).

Primary type. Holotype O: New South Wales, Ulong, eastern Dorrigo, ca. 2000 ft, 31. 12. 1926; W. Heron (NMNH); seen.

Published records. New South Wales: Ulang, eastern Dorrigo, ca. 2000 ft (ALEXANDER 1929a: 341).

Genitalia. Male hypopygium, Fig. 37.

Remarks. Similar to M. coraperena sp. n., M. dindi sp. n., M. gracillimus ALEX., M. subasper ALEX. and M. tersus ALEX.

New records. New South Wales: Brooklana, eastern Dorrigo, 2000—3000 ft (NMNH); Bruxner Park, Coffs Harbour (ANIC); Dorrigo National Park, Never Never area (GT); eastern Dorrigo, 2000—3000 ft (NMNH); Mt Banda Banda (GT).

Distribution. New South Wales (NEN).

Molophilus (Austromolophilus) gracillimus Alexander (Figs 38, ?39)

Molophilus gracillimus Alexander, Ann. Mag. nat. Hist. (9) 20: 356 (1927).

Primary type. Holotype of: New South Wales (ANIC); seen.

Published records. New South Wales (ALEXANDER 1927d: 357).

Genitalia. Male hypopygium, Figs 38, ?39) Remarks. Similar to *M. coraperena* sp. n., *M. dindi* sp. n., *M. exquisitus* ALEX., *M. subasper* ALEX. and *M. tersus* ALEX. Outer branch of inner gonostylus apparently somewhat variable. New records. New South Wales: Sydney (ANIC).

Distribution. New South Wales.

Molophilus (Austromolophilus) subasper Alexander (Fig. 40)

Molophilus subasper Alexander, Ann. Mag. nat. Hist. (10) 7: 168 (1931).

Primary type. Holotype O: Victoria, Healesville, 21. 4. 1929, F. E. Wilson (MV); seen; genitalia missing.

Published records. Victoria: Healesville (ALEXANDER 1931a: 170).

Genitalia. Male hypopygium, Fig. 40.

Remarks. Similar to. M. coraperena sp. n., M. dindi sp. n., M. exquisitus ALEX., M. gracillimus ALEX. and M. tersus ALEX.

New records. New South Wales: Macquarie Pass (GT); Macquarie Rivulet (GT). Victoria: Warburton (NMNH).

Distribution. New South Wales (SEN), Victoria.

Molophilus (Austromolophilus) tersus Alex-ANDER (Figs 41, ?42)

Molophilus tersus Alexander, Ann. Mag. nat. Hist. (10) 7: 167 (1931).

Primary type. Holotype O: New South Wales, eastern Dorrigo, 2000—3000 ft, 27. 2. 1929, W. Heron (NMNH); seen; genitalia in bad condition.

Published records. New South Wales: eastern Dorrigo, 2000—3000ft (Alexander 1931: 168).

Genitalia. Male hypopygium, Figs ?41, 42. Remarks. Similar to *M. coraperena* sp. n., *M. dindi* sp. n., *M. exquisitus* ALEX., *M. gracillimus* ALEX. and *M. subasper* ALEX. Outer branch of inner gonostylus apparently somewhat variable. New records. New South Wales: Dorrigo, 2300 ft (NMNH); 3 km N Lansdowne, near Taree (GT).

Distribution. New South Wales (NEN).

Molophilus (Austromolophilus) binyana spec. nov. (Fig. 43)

Description (O). Colouration: largely greyish brown; head grey, antennae missing; wings pale greyish yellow, halteres whitish grey; coxae and trochanters greyish yellow, remainder of legs missing.

Dimensions. Wing length not available (distal portion of wings missing).

Genitalia. Hypopygium, Fig. 43.

Remarks. Similar to M. denise Thei., M. fragillimus Thei., M. lea sp. n., M. nurawordubununa sp. n. and M. trianguliferus Alex. Diagnostic for M. binyana are the large and for most of their length convergent inner branches of the inner gonostylus.

Material examined. Holotype O: Victoria, Genoa Creek, Falls 3 km W of Genoa, 28. 3. 1974, A. Neboiss (MV).

Distribution. Victoria.

Name. Binyana (Australian Aboriginal word for "chisel") refers to the shape of the inner (ventral) branch of the inner gonostylus.

Molophilus (Austromolophilus) denise Theischinger (Fig. 44)

Molophilus (Austromolophilus) denise Theischinger, Stapfia 17: 168 (1988).

Primary type. Holotype O: Queensland, Searys Creek, near Rainbow Beach, 9. 1. 1986, at light, C., D. and G. Theischinger (ANIC); seen.

Published records. Queensland: Searys Creek, near Rainbow Beach (Theischinger 1988a: 169). Previous illustrations. Theischinger 1988a: Fig.4.

Genitalia. Male hypopygium, Fig. 44.

Remarks. Similar to M. binyana sp. n., M. fragillimus Thei., M. lea sp. n., M. nurawordubununa sp. n. and M. trianguliferus ALEX.

New records. Queensland: Searys Creek, near Rainbow Beach.

Distribution. Queensland (SEQ).

Molophilus (Austromolophilus) nurawordubununa spec. nov. (Fig. 45)

Description (O). Colouration: largely yellowish to dark brown; head dark brown; wings yellowish to greyish and slightly reddish brown, halteres dull yellow; legs missing.

Dimensions. Wing length 3,1 mm.

Genitalia. Hypopygium, Fig. 45.

Remarks. Very similar to *M. denise* Thei. and *M. fragillimus* Thei. Diagnostic for *M. nurawordubununa* is the slender and almost straight inner branch of the inner gonostylus. Material examined. Holotype of: Queensland, Malanda, Atherton Tableland, 800 m, 9. 5. 1961, light trap, J. L. and M. Gressitt (ANIC). Distribution. Queensland (NEQ).

Name. Nurawordubununa (Australian Aboriginal word for "carpet snake") refers to the shape of the outer branch of the inner gonostylus.

Molophilus (Austromolophilus) fragillimus Theischinger (Fig. 46)

Molophilus (Austromolophilus) fragillimus Theischinger, Stapfia 17: 169 (1988).

Primary type. Holotype O: Queensland, Moses Creek, 4 km N by E of Mt Finnigan, 15. 10. 1980, malaise trap, D. H. Colless (ANIC); seen. Published records. Queensland: Moses Creek, 4 km N by E of Mt Finnigan; 16°35'S/145°22'E, Julatten (both Theischinger 1988a: 170).

Previous illustrations. Theischinger1988a: Fig.5.

Genitalia. Male hypopygium, Fig. 46.

Remarks. Similar to M. binyana sp. n., M. denise Thei., M. lea sp. n., M. nurawordubununa sp. n. and M. trianguliferus ALEX.

New records. None. Distribution. Queensland (CY, NEQ).

Molophilus (Austromolophilus) lea spec. nov. (Fig. 47)

Description (O). Colouration: largely pale greyish to brownish yellow; head yellowish to brownish grey, antennae greyish yellow; wings pale yellowish grey with slightly darker patch, halteres whitish to yellowish grey; legs greyish yellow, apex of femora and tibiae slightly darkened.

Dimensions. Wing length 3,6—3,9 mm.

Genitalia. Hypopygium, Fig. 47.

Remarks. Most similar to *M. fragillimus* THEI. Diagnostic for *M. lea* is the strongly angulated dorsal lobe of the gonocoxite.

Material examined. Holotype O: New South Wales, Macquarie Pass, 13. 10. 1986, G. Theischinger and L. Müller (ANIC). Paratypes: New South Wales: 3 O, same data as holotype (GT); 10 O, type locality, Nov. 1988, G. Theischinger (GT).

Distribution. New South Wales (SEN).

Name. Lea (Australian Aboriginal word for "tooth") refers to the strongly protruding dorsal lobe of the gonocoxite.

Molophilus (Austromolophilus) trianguliferus Alexander (Figs 48, 49)

Molophilus trianguliferus Alexander, Ann. Mag. nat. Hist. (9) 20: 364 (1927).

Molophilus capitellum Alexander, Ann. Mag. nat. Hist. (10) 7: 171 (1931).

Molophilus (Austromolophilus) trianguliferus Alexander; Theischinger, Stapfia 17: 170 (1988).

Primary types. Holotype of of M. trianguliferus ALEXANDER: New South Wales, Wentwoth Falls, Blue Mts, 2844 ft, 8. 11. 1921, A. Tonnoir (ANIC); seen. Holotype of of M. capitellum ALEXANDER: New South Wales, Murrumbidgee River, A. C. T., 5. 10. 1929, A. Tonnoir (supposedly in ANIC, not found; parts in NMNH); seen.

Published records. Queensland: 2 km S of Horseshoe Lookout, Blackdown Tableland; jn

of Goldmine and Davies Cks, Kuranda-Mareeba rd; Upper Brookfield, near Brisbane; Woodridge (all Theischinger 1988a: 171). New South Wales: French's Forest, near Sydney; Narara; Sydney; Wentworth Falls, Blue Mts, 2844 ft (all Alexander 1927d: 366); Murrumbidgee River, A. C. T. (Alexander 1931a: 172). Previous illustrations. Theischinger 1988a: Figs 6,7.

Genitalia. Male hypopygium, Figs 48, 49. Remarks. Similar to *M. binyana* sp. n., *M. denise* Thei., *M. nurawordubununa* sp. n., *M. fragillimus* Thei. and *M. lea* sp. n.

New records. Queensland: Eungella, via Mackay, 2300 ft (NMNH); Lamington National Park, O'Reilly's Guesthouse (NMNH); Samford Valley near Brisbane (NMNH); Samford Valley WNW Brisbane (NMNH). New South Wales: Black Mtn, A. C. T. (ANIC); Blundell's, A. C. T. (ANIC); Brooklana, eastern Dorrigo (NMNH); 5 mi. W of Coffs Harbour (ANIC); 18 mi. Dorrigo-Coramba rd (ANIC); Mt Dromedary, 1000 ft (ANIC); Fitzroy Falls, 2500 ft (ANIC); Little Nymboida River, Dorrigo-Corambard (ANIC); Megalong Valley (NMNH); Mongarlowe River, Clyde Mtn (ANIC); Narooma (ANIC); New England National Park, 4500 ft (ANIC); Mt Tomah (NMNH); Warrumbungle (ANIC); Weismantels (ANIC). Victoria: Beaconsfield (NMNH); Bell Bird (ANIC); Cape Otway (MV); Clarkefield (NMNH); Mt Dandenong (NMNH); Ferntree Gully (NMNH); Grampians (ANIC); Lorne (ANIC); Marysville -Cumberland Ck (ANIC); Ringwood (NMNH); Simpson's Gippsland Ck, (ANIC); Wallagaraugh (ANIC); Walhalla (NMNH); Wilson's Promontory, Chinaman's Ck (ANIC); Woori-Yallok (NMNH). Tasmania: National Park (NMNH).

Distribution. Queensland (NEQ, SEQ), New South Wales (NEN, SEN), Victoria, Tasmania.

Molophilus (Austromolophilus) pinta spec. nov. (Fig. 50)

Description. Colouration: largely yellowish to greyish brown; head and antennae brownish grey; wings pale greyish yellow with large greyish brown patches, halteres dull yellow; legs dull yellow to yellowish grey, with apex of femora and base and apex of tibiae greyish black.

Dimensions. Wing length, male 3,5—4,2 mm, female 3,2—4,0 mm.

Genitalia. Male hypopygium, Fig. 50.

Remarks. Most similar to *M. yandala* sp. n. Diagnostic for *M. pinta* are the thin distal portion of the inner, and the tapering serrate outline of the outer branch of the inner gonostylus.

Material examined. Holotype O: New South Wales, New England National Park, 19. 10. 1962, D. H. Colless (ANIC). Paratypes: New South Wales: 3 O, 6 Q, Mt Banda Banda, 1200 m, 8. 12. 1986, G. Theischinger (ANIC, GT); 1 O, Brooklana, E Dorrigo, 2000 ft, 8. 8. 1928, W. Heron (NMNH).

Distribution. New South Wales (NEN).

Name. Pinta (Australian Aboriginal word for "bamboo spear") refers to the shape of the inner branch of the inner gonostylus.

Molophilus (Austromolophilus) yandala spec. nov. (Fig. 51)

Description (O). Colouration: largely brownish grey; antennae greyish brown; wings pale greyish brown, halteres dull whitish yellow; legs dark greyish brown.

Dimensions. Wing length 3,5—3,8 mm.

Genitalia. Hypopygium, Fig. 51.

Remarks. Most similar to *M. pinta* sp. n. Diagnostic for *M. yandala* are the thin distal portion of the inner branch and the apical enlargement of the outer branch of the inner gonostylus.

Material examined. Holotype of: New South Wales, Kiandra, Alpine Creek, 9. 12. 1964, N. Dobrotworsky (ANIC). Paratypes: New South Wales: 1 of, same data as holotype (GT); 1 of, Mt Gingera, A. C. T., 11. 1. 1967, D. H. Colless (ANIC).

Distribution. New South Wales (SEN).

Name. Yandala (Australian Aboriginal word for "spear with a long point") refers to the shape of the inner branch of the inner gonostylus.

Molophilus (Austromolophilus) incomptus Alexander (Fig. 52)

Molophilus incomptus Alexander, Ann. Mag. nat. Hist. (9) 20: 366 (1927).

Primary type. Holotype O: New South Wales, Wentworth Falls, Blue Mts, 2844 ft, 18. 11. 1921, A. Tonnoir (ANIC); seen.

Published records. New South Wales: Wentworth Falls, Blue Mts, 2844 ft (ALEXANDER 1927d: 367).

Genitalia. Male hypopygium, Fig. 52.

Remarks. Similar to M. pervagatus Skuse, M. pulchripes Skuse, M. pusio Alex. and M. subhastatus Alex.

New records. None.

Distribution. New South Wales (SEN).

Molophilus (Austromolophilus) pervagatus Skuse (Fig. 53)

Molophilus pervagatus Skuse, Proc. Linn. Soc. N. S. W. 4: 813 (1890).

Molophilus pervagatus Skuse; Alexander, Proc. Linn. Soc. N. S. W. 54: 143(1929).

Primary type. Lectotype of: New South Wales, no further data available (ANIC); seen.

Published records. New South Wales: Waterfall; Wentworth Falls, Blue Mts (both ALEXANDER 1929b: 143).

Previous illustrations. ALEXANDER 1929b: Fig. 10

Genitalia. Male hypopygium, Fig. 53.

Remarks. Similar to M. incomptus Alex., M. pulchripes Skuse, M. pusio Alex. and M. subhastatus Alex.

New records. New South Wales: Fitzroy Falls (ANIC); Hartley Vale (GT); Heathcote Brook (GT); Linden, Blue Mts (GT); Macquarie Pass (GT); Megalong Valley (NMNH); Mt Tomah, Blue Mts (NMNH); Mt Victoria, Blue Mts (NMNH); Mt Wilson (GT); Sassafras Gully, Springwood (AM); Wentworth Falls, Blue Mts (NMNH).

Distribution. New South Wales (SEN).

Molophilus (Austromolophilus) pulchripes Skuse (Fig. 54)

Molophilus pulchripes Skuse, Proc. Linn. Soc. N. S. W. 4: 812 (1890).

Molophilus hastatus Alexander, Ann. Mag. nat. Hist. (9) 20: 359 (1927).

Molophilus pulchripes Skuse; Alexander, Proc. Linn. Soc. N. S. W. 54: 143 (1929).

Molophilus (Austromolophilus) pulchripes Skuse; Theischinger, Stapfia 17: 171 (1988).

Primary types. Lectotype of M. pulchripes Skuse: New South Wales, Sydney, Sep. (ANIC); seen. Holotype of M. hastatus Alexander: Tasmania, Burnie, 25. 10. 1922, A. Tonnoir (ANIC); seen.

Published records. Queensland: Clayton Gully 2,5 mi E of Cunningham's Gap; Mitchell Gully, 2 mi. E of Cunningham's Gap; Shiptons Flat (all Theischinger 1988a: 172). New South Wales: Barrington Tops, 5000 ft; Brooklana, eastern Dorrigo; Sydney (all Alexander 1929b: 143). Victoria: Clarkefield; Eltham; Melton; Ringwood (all Alexander 1929b: 144). Tasmania: Burnie; Eaglehawk Neck (both Alexander 1927d: 360, 361).

Previous illustrations. Alexander 1929b: Fig. 11; Theischinger 1988a: Fig. 8.

Genitalia. Male hypopygium, Fig. 54.

Remarks. Similar to M. incomptus ALEX., M. pervagatus Skuse, M. pusio ALEX. and M. subhastatus ALEX.

New records. Queensland: Birthday Ck, 6 km NW by W of Paluma (ANIC); Conondale Range, Bundaroo Ck (MV); Mt Glorious NE of Brisbane (NMNH). New South Wales: Barrington Tops (NMNH); Blackheath, Blue Mts (NMNH); Blundell's, A. C. T. (ANIC); Brooklana, eastern Dorrigo, 2000 ft (NMNH); Engadine (GT); Gibraltar Ck, A. C. T. (ANIC); 38 mi. Glen Innes to Grafton (ANIC); Heathcote Brook, near Heathcote (GT); Jenolan Caves (NMNH); Mt Keira (GT); Kiandra, 2100 ft (ANIC); Macquarie Pass (GT); Minnamurra Falls (ANIC); Mooraback, Werrikimbi National Park (GT); New England National Park, 4500 ft (ANIC); Somersby Falls, near Gosford (GT); Tinker Ck, Uriarra, A. C. T. (ANIC); Uloola Ck, Royal National Park (GT); Warrambungles (ANIC); Waterfall (ANIC);

Waterfall, National Falls (GT); Weismantels (ANIC); Mt Wilson, Blue Mts (GT); Wilson River Reserve, 15 km NW Bellangry (GT); Wollondilly River, near Goodmans Ford (GT); Young (ANIC). Victoria: Beech Forest (NMNH); Beenak (NMNH); Belgrave (NMNH); Bells Clearing, 6 km S of Aberfeldy (MV); Ben Cairn, near Millgrove, 2800—3200 ft (NMNH); Bogong (ANIC); Britannia Ck, 6 km S of Warburton (MV); Cabbanah (ANIC); Clarkefield (NMNH); Dandenong, Sherbrook Forest (MV); Eltham (NMNH); Grampians (NMNH); Grampians, Delleys Dell (MV); Kilmore (NMNH); Lake Mtn (ANIC); Lorne (ANIC); Lorne, Deanes Marsh (MV); Maroondah (ANIC); Melton (NMNH); Otway Range, Maits Rest (MV); Ringwood (NMNH); Sassafras Ck, 1 km N of Kallista (MV); Toorongo Falls (ANIC); Treasure's, 3900 ft (ANIC); Walhalla (NMNH); Warburton (NMNH); Warburton, 3000—3800 ft (NMNH); Wentworth River, near Taberraberra (MV); Werribee Gorge (NMNH); Wilson's Promontory, Chinaman's Ck (ANIC); Wonnangatta River, E of Mt Howitt (MV); Yarra River, below Upper Yarra Dam (MV); Yarra River, Warburton East (MV). Tasmania: Burnie (NMNH); National Park (NMNH). South Australia: Aldgate, Lofty Ranges (NMNH); Corkscrew, Adelaide Hills (MV); Hackham (MV); Tungkillo (MV).

Distribution. Queensland (CY, NEQ, SEQ), New South Wales (NEN, SEN), Victoria, Tasmania, South Australia (SES).

Molophilus (Austromolophilus) pusio Alex-Ander (Fig. 55)

Molophilus pusio Alexander, Ann. Mag. nat. Hist (9) 20: 358 (1927).

Primary type. Holotype of: Victoria, Sassafras, Dandenong Range, 1000 ft., 19. 10. 1922, A. Tonnoir (ANIC); seen.

Published records. Victoria: Sassafras, Dandenong Range, 1000 ft (ALEXANDER 1927d: 359).

Genitalia. Male hypopygium, Fig. 55.

Remarks. Similar to M. incomptus ALEX., M.

pervagatus Skuse, M. pulchripes Skuse and M. subhastatus Alex.

New records. Victoria. Cumberland Creek (ANIC); Millgrove (NMNH); Mt Baw Baw, 3600 ft (ANIC); Mt Donna Buang (GT); Mt Donna Buang, 3000—4000 ft (NMNH); mountains above Millgrove (NMNH). Distribution. Victoria.

Molophilus (Austromolophilus) subhastatus Alexander (Fig. 56)

Molophilus subhastatus Alexander, Ann. Mag. nat. Hist. (10) 7: 170 (1931).

Primary type. Holotype O: Victoria, Monbulk, 28. 1. 1929, E. F. Wilson (MV); seen.

Published records. Victoria: Ben Cairn, near Millgrove; Monbulk (both ALEXANDER 1931a: 171). Tasmania Wilmot (Alexander 1931a: 171). Genitalia. Male hypopygium, Fig. 56.

Remarks. Similar to M. incomptus ALEX., M. pervagatus Skuse, M. pulchripes Skuse and M. pusio ALEX.

New records. Victoria: Crowe's, Otway Peninsula (NMNH); Walhalla (NMNH). Distribution. New South Wales (SEN), Victoria, Tasmania.

Molophilus (Austromolophilus) expansistylus Alexander (Fig. 57)

Molophilus expansistylus Alexander, Ann. Mag. nat. Hist. (10) 3: 344 (1929).

Molophilus expansistylus ALEXANDER; ALEXANDER, Proc. Linn. Soc. N. S. W. 69: 11 (1944).

Molophilus (Austromolophilus) expansistylus Alexander; Theischinger, Stapfia 17: 169 (1988).

Primary type. Holotype O: Victoria, Ringwood, 400 ft, 27. 5. 1927, C. Barrett (NMNH); seen. Published records. Queensland: Eukey (ALEXANDER 1944: 11). Victoria: Ringwood, 400 ft (ALEXANDER 1929a: 345).

Genitalia. Male hypopygium, Fig. 57.

Remarks. Very similar to *M. warriuka* sp. n. New records. Victoria: Eltham (NMNH); Ringwood (NMNH).

Distribution. Queensland (SEQ), Victoria.

Molophilus (Austromolophilus) warriuka spec. nov. (Fig. 58)

Description(O). Colouration: largely greyish brown; head brownish grey, antennae dark greyish yellow; wings pale greyish brown with darker patches; halteres greyish yellow; legs yellowish grey to greyish brown, femora with paler subapical ring and darkened apex, protibia with darker base.

Dimensions. Wing length 4,4—5,8 mm.

Genitalia. Hypopygium, Fig. 58.

Remarks. Most similar to *M. expansistylus* ALEX. Diagnostic for *M. warriuka* is the boatshaped inner branch of the inner gonostylus. Material examined. Holotype O: New South Wales, Black Mtn, A. C. T., 27. 1. 1967, light trap, I. F. B. Common (ANIC). Paratypes: New South Wales: 2 O, Yass, 4. 9. 1933, K. English (NMNH). Victoria: 1 O, Devon North, 5. 8. 1951, G. W. Douglas (GT); 1 O, Simpson's Creek, Gippsland, 19. 11. 1964, N. Dobrotworsky (ANIC).

Distribution. New South Wales (SEN), Victoria. Name. Warriuka (Australian Aboriginal word for "ship") refers to the ship-shaped inner branch of the inner gonostylus.

Molophilus (Austromolophilus) kirra spec. nov. (Fig. 59)

Description(O). Colouration: largely greyish brown; head brownish grey, antennae brown; wings brownish grey with markedly darker patch, halteres dark yellowish grey; legs yellowish to greyish brown.

Dimensions. Wing length 3,7—4,7 mm.

Genitalia. Hypopygium, Fig. 59.

Remarks. Most similar to *M. phyllis* ALEX. Diagnostic for *M. kirra* is the smooth subapical keel of the outer branch of the inner gonostylus. Material examined. Holotype O: Victoria, Otway Ranges, Turtons Pass, May 1961, D. Duckhouse (MV). Paratypes: Victoria: 5 O, same data as holotype (MV); 18 O, type locality, June 1961, D. Duckhouse (GT, MV); 3 O, Otway Ranges, Lavers Hill, Aug. 1960, D. Duckhouse (MV); 21 O, same locality, May 1961, D. Duckhouse (GT, MV); 4 O, Otway

Ranges, Maits Rest, May 1960, D. Duckhouse (MV); 1 °C, Otway Ranges, Melba Gully, Aug. 1960, D. Duckhouse (MV); 3 °C, same locality, May 1961, D. Duckhouse (MV).

Distribution. Victoria.

Name. Kirra (Australian Aboriginal word for "leaf") refers to the leaf-shaped apex of the outer branch of the inner gonostylus.

Molophilus (Austromolophilus) phyllis Alex-Ander (Fig. 60)

Molophilus phyllis Alexander, Ann. Mag. nat. Hist. (10) 5: 385 (1930).

Primary type. Holotype of: Victoria, Grampians, in treefern gully, Oct. 1928, F.E. Wilson (MV); seen; genitalia missing.

Published records. Victoria: Grampians (ALEXANDER 1930: 385).

Genitalia. Male hypopygium, Fig. 60.

Remarks. Very similar to M. kirra sp. n.

New records. Victoria: Delleys Dell, Grampians (MV).

Distribution. Victoria.

Molophilus (Austromolophilus) palpera spec. nov. (Fig. 61)

Description(O). Colouration: largely dark greyish brown; head brownish grey, antennae brown; wings and halteres pale greyish brown; legs yellowish to greyish brown.

Dimensions. Wing length 3,8 mm.

Genitalia: Hypopygium, Fig. 61.

Remarks. Similar to *M. kirra* sp. n. and *M. phyllis* ALEX. Diagnostic for *M. palpera* are the slender, apically widened and toothed, inner branch and the bent, pointed, outer branch of the inner gonostylus.

Material examined. Holotype of: Victoria, Mt Baw Baw, 4000 ft, 30. 11. 1964, N. Dobrotworsky (ANIC).

Distribution. Victoria.

Name. Palpera (Australian Aboriginal word for "leaf") refers to the leaf-shaped inner branch of the inner gonostylus.

Molophilus (Austromolophilus) cranstoni spec. nov. (Fig. 62)

Description(\mathcal{O}). Colouration: largely greyish brown; head brownish grey, antennae yellowish grey; wings pale yellowish grey with darker patch, halteres greyish yellow; coxae and trochanters pale brownish yellow, remainder of legs brownish yellow to greyish brown with apex of femora and tibiae slightly darkened.

Dimensions. Wing length 3,7—4,3 mm.

Genitalia. Hypopygium, Fig. 62.

Remarks. Very similar to *M. diversistylus* ALEX. and *M. gweeon* sp. n. Diagnostic for *M. cranstoni* is the very slender, mesally serrate, pointed inner branch of the inner gonostylus.

Material examined. Holotype of: New South Wales, A. C. T. Brindabellas, Blundell's Creek, Oct. 1988, malaise trap, P. S. Cranston (ANIC). Paratypes: New South Wales: 5 of, same data as holotype (ANIC, GT).

Distribution. New South Wales (SEN).

Name. This species is dedicated to Dr P. S. Cranston (Canberra) who collected the type series.

Molophilus (Austromolophilus) diversistylus Alexander (Fig. 63)

Molophilus diversistylus Alexander, Ann. Mag. nat. Hist. (9) 20: 362 (1927).

Primary type. Holotype of: Victoria, Sassafras, Dandenong Range, 1000 ft, 21. 10. 1922, A. Tonnoir (ANIC); seen.

Published records. Victoria: Sassafras, Dandenong Range, 1000 ft (ALEXANDER 1927d: 363). Tasmania: Eaglehawk Neck; Fern Tree, Mt Wellington; King River; Mt Wellington; National Park (all ALEXANDER 1927d: 363).

Genitalia. Male hypopygium, Fig. 63.

Remarks. Very similar to *M. cranstoni* sp. n. and *M. gweeon* sp. n.

New records. Victoria: Beech Forest (NMNH); Cape Otway (MV); Crowe's (NMNH); Grampians (MV); Hordern Vale (NMNH); Lavers Hill, Otway Range (MV); Maits Rest, Otway Range (MV); Maroondah (ANIC); Marysville, Cumberland Valley (NMNH); Millgrove (NMNH); Millgrove, 500-1000 ft (NMNH); Millgrove 1000 ft (NMNH); Wilsons's Promontory, Chinaman's Creek (ANIC). Tasmania: Florentine River, 15 km W Maydena (MV); Maria Island (ANIC); National Park (NMNH); Scottsdale (NMNH). Distribution. Victoria, Tasmania.

Remarks. Not very similar to any other described species.

New records. None.

THEISCHINGER (Fig. 66)

Stapfia 17: 167 (1988).

Distribution. Queensland (NEO).

Molophilus (Austromolophilus) gweeon spec. nov. (Fig. 64)

Description(O). Colouration: largely greyish brown; head brownish grey, antennae yellowish grey; wings yellowish to pale greyish brown, halteres whitish grey; legs greyish yellow to greyish brown.

Dimensions. Wing length 4,9 mm.

Genitalia. Hypopygium, Fig. 64.

Remarks. Very similar to M. cranstoni sp. n. and M. diversistylus ALEX. Diagnostic for M. gweeon is the wide, leaf-shaped, laterally serrate, inner branch of the inner gonostylus.

Material examined. Holotype O: New South Wales, 7 km E of Lithgow, 2. 10. 1979, G. Theischinger and L. Müller (ANIC).

Distribution. New South Wales (SEN).

Name. Gweeon (Australian Aboriginal word for ,,stone tomahawk") refers to the apex of the gonocoxite.

Molophilus (Austromolophilus) heroni ALEX-

Molophilus heroni Alexander, Ann. Mag. nat. Hist. (10) 3: 345 (1929).

Primary type. Holotype O: New South Wales, Brooklana, eastern Dorrigo, ca. 2000 ft, 18. 3. 1927, W. Heron (NMNH); seen.

Published records. New South Wales: Brooklana, eastern Dorrigo, ca. 2000 ft (ALEX-ANDER 1929a: 346).

Genitalia. Male hypopygium, Fig. 67.

Remarks. Not very similar to any other described species.

New records. New South Wales: Cascade (NMNH); Cobcroft Creek, Werrikimbi National Park, 1100 m (GT); Cockerawombeeba Creek, 23 km WNW Bellangry, 730 m (GT). Distribution. New South Wales (NEN).

Molophilus (Austromolophilus) benesignatus THEISCHINGER (Fig. 65)

Molophilus (Austromolophilus) benesignatus THEISCHINGER, Stapfia 17: 166 (1988).

Primary type. Holotype(O) Queensland, Birthday Creek, 6 km NW by W of Paluma, 25. 9. 1980, malaise trap, D. H. Colless (ANIC), seen.

Published records. Queensland: Birthday Creek, 6 km NW by W of Paluma (THEISCHINGER 1988a: 166).

Previous illustrations. Theischinger 1988a:

Genitalia. Male hypopygium, Fig. 65.

Primary type. Holotype O: Queensland, Conondale Range, Bundaroo Creek, 3. 12. 1985, G. Cassis and D. J. Bickel (ANIC); seen.

Molophilus (Austromolophilus) cassisi

Molophilus (Austromolophilus) cassisi Theischinger,

Published records. Queensland: Conondale Range, Bundaroo Creek (THEISCHINGER 1988a: 167).

Previous illustrations. Theischinger 1988a: Fig.2.

Genitalia. Male hypopygium, Fig. 66.

Remarks. Not very similar to any other described species.

New records. Queensland: Mt Glorious, 600 m (BPBM).

Distribution. Queensland (SEQ).

ANDER (Fig. 67)

Molophilus (Austromolophilus) eugonia Alexander

Molophilus eugonia Alexander, Ann. Mag. nat. Hist. (9)20: 357 (1927).

Primary type. Holotype of: Tasmania, Hartz Mts, 3000 ft, 9. 12. 1922, A. Tonnoir (ANIC); seen; genitalia missing.

Published records. Tasmania, Hartz Mts, 3000 ft (ALEXANDER 1927d: 358).

Genitalia. Male hypopygium with the gonocoxites relatively short and stout, the apex not conspicuously produced, armed with a dense patch of yellow setae. Outer gonostylus short, heavily blackened, apparently simple, but the apex dilated outwardly and transversely truncated. Outer branch of inner gonostylus a broad flattened blade that tapers gradually to a long straight apical spine; inner branch of inner gonostylus shorter and more slender, the apex only slightly dilated into an oval head that is about one-fifth the total length of the style, the base and margins of the head with conspicuous small erect spinules.

Remarks. A clear interpretation and an illustration of M. eugonia are not possible at the present.

New records. None.

Distribution. Tasmania.

Molophilus (Austromolophilus) echidna spec. nov. (Fig. 68)

Description (O). Colouration: largely yellowish to blackish brown; head greyish brown, antennae greyish yellow; wings yellowish grey with dark brown patches, halteres dull yellow; coxae and trochanters pale greyish yellow; mid leg with narrow apical ring on femur, tibia and basitarsus blackish brown and remaining tarsal segments greyish to blackish brown; fore and hind leg missing.

Dimensions. Wing length 3,2 mm.

Genitalia. Hypopygium, Fig. 68.

Remarks. Not very similar to any other described species. Diagnostic for *M. echidna* are the abundant spines and bristles on both branches of the inner gonostylus.

Material examined. Holotype O: Queensland,

Tulley Falls, light trap, 10. 3. 1956, J. L. Gressitt (ANIC).

Distribution. Queensland (NEQ).

Name. Echidna (generic name of the "Spiny Ant-eater") refers to the spiny branches of the inner gonostylus; echidna is to be regarded as undeclinable noun in apposition to *Molophilus*.

Molophilus (Austromolophilus) mattfulleri spec. nov. (Fig. 69)

Description(O). Colouration: largely greyish brown; head dark brown, antennae yellowish grey; wings pale greyish brown, halteres pale greyish yellow; legs yellowish grey with apex of femora and tibiae darker.

Dimensions. Wing length 3,8—4,3 mm.

Genitalia. Hypopygium, Fig. 69.

Remarks. Not similar to any other described species. Diagnostic for *M. mattfulleri* are the complex apex of the outer gonostylus and the strongly arched, thin outer branch of the inner gonostylus.

Material examined. Holotype O: New South Wales, Macquarie Pass, 13. 10. 1986, G. Theischinger (ANIC). Paratypes: New South Wales: 2 O, Wentworth Falls, Oct. 1930, F. E. Wilson (GT, NMNH).

Distribution. New South Wales (SEN).

Name. This species is dedicated to Mr Matthew Fuller, in recognition of his assistance in collecting *Molophilus* in the Sydney area.

Molophilus (Austromolophilus) setuliferus Alexander (Fig. 70)

Molophilus setuliferus Alexander, Ann. Mag. nat. Hist. (9) 20: 361 (1927).

Primary type. Holotype of: Tasmania, Mt Wellington, 26. 11. 1922, A. Tonnoir (ANIC); seen.

Published records. Tasmania: Mt Wellington (ALEXANDER 1927d: 362).

Genitalia. Male hypopygium, Fig. 70.

Remarks. Not very similar to any other described species. New records. Tasmania: National Park (NMNH).

Distribution. Tasmania.

Molophilus (Austromolophilus) uncinatus Theischinger (Fig. 71)

Molophilus (Austromolophilus) uncinatus Theischinger, Stapfia 17: 173 (1988).

Primary type. Holotype O: Queensland, Birthday Creek, 6 km NW by W of Paluma, 25. 9. 1980, at light, D. H. Colless (ANIC); seen. Published records. Queensland: Birthday Creek, 6 km NW by W of Paluma (Theischinger 1988a: 173).

Previous illustrations. Theischinger 1988a: Fig. 10.

Genitalia. Male hypopygium, Fig. 71.

Remarks. Not very similar to any other decribed species.

New records. None.

Distribution. Queensland (NEQ).

Molophilus (Austromolophilus) uptoni Theischinger (Fig. 72)

Molophilus (Austromolophilus) uptoni Theischinger, Stapfia 17: 173 (1988).

Primary type. Holotype O: Queensland, Suicide Creek, 8 km W by S Millaa Millaa, 25. 4. 1981, at light, D. H. Colless (ANIC); seen.

Published records. Queensland: Suicide Creek, 8 km W by S Millaa Millaa; SSE of Ravenshoe, 2750 ft (Theischinger 1988a: 174).

Previous illustrations. Theischinger 1988a: Fig. 11.

Genitalia. Male hypopygium, Fig. 72.

Remarks. Not very similar to any other described species.

New records. None.

Distribution. Queensland (NEQ).

Diplomolophilus subgen. nov. (Fig. 14)

Type species: *Molophilus mongana* sp. n. Definition. Male hypopygium with posterior margin of tergite 9 not strongly sclerotized or armed. Gonocoxite with ventral lobe well developed, long and slender, mesal lobe very well developed and drawn out into a long point, and dorsal lobe only moderately developed and short but with a conspicuous dorsal appendage

bearing one or several large apical bristles; mesodorsal apodeme of gonocoxite not reaching base of tergite 9. Outer gonostylus of normal size and not originating far from base of inner gonostylus which is single-branched. Parameres fused.

Remarks. The bristle-bearing appendage of the dorsal lobe of the gonocoxite and the extraordinary development of the mesal lobe are considered apomorphic and diagnostic for *Diplomolophilus*.

Distribution. Australia (south-eastern).

Name. *Diplomolophilus* (diplos = Greek for "double") refers to the "double" dorsal lobe of the gonocoxite.

The Australian species of *Molophilus* (*Diplomolophilus*)(in alphabetical order): *mongana* sp. n.

yumbera sp. n.

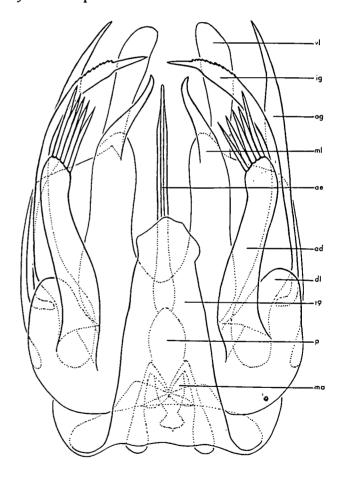


Fig. 14. Molophilus (Diplomolophilus) mongana sp. n., male hypopygium, dorsal aspect. Abbrevations: ad = appendix of dorsal lobe of gonocoxite; ae = aedeagus; dl = dorsal lobe of gonocoxite; ig = inner gonostylus; ma = mesodorsal apodeme of gonocoxite; ml = mesal lobe of gonocoxite; og = outer gonostylus; p = parameres; t9 = tergite 9; vl = ventral lobe of gonocoxite.

Molophilus (Diplomolophilus) mongana spec. nov. (Fig. 73)

Description (O). Colouration: largely pale to dark greyish brown; head grey, antennae dark yellowish brown; wings pale brownish grey, halteres greyish yellow; legs yellowish to greyish brown.

Dimensions. Wing length 3,5—4,1 mm. Genitalia. Hypopygium, Fig. 73.

Remarks. Closely related but not very similar to *M. yumbera* sp. n. Diagnostic for *M. mongana* are the unforked gonostyli and the substantial appendix of the dorsal lobe of the gonocoxite. Material examined. Holotype O: Victoria, Melba Gully, Otway Ranges, May 1961, D. Duckhouse (MV). Paratypes: Victoria: 3 O, same data as holotype (GT, MV); 3 O, Rest Gully, Otway Ranges, May 1961, D. Duckhouse (GT, MV).

Distribution. Victoria.

Name. Mongana is an Australian Aboriginal word for "fly".

Molophilus (Diplomolophilus) yumbera spec. nov. (Fig. 74)

Description. Colouration: largely dark yellowish to greyish brown; head grey, antennae greyish brown; wings pale greyish brown with slightly darker patch, halteres whitish yellow; legs yellowish to greyish brown.

Dimensions. Wing length, male 3,6—4,2 mm, female 3,7—4,1 mm.

Genitalia. Male hypopygium, Fig. 74.

Remarks. Closely related but not very similar to *M. mongana* sp. n. Diagnostic for *M. yumbera* are the forked gonostyli and the slender appendix of the dorsal lobe of the gonocoxite.

Material examined. Holotype O: New South Wales, Fitzroy Falls, 2500 ft, 21. 10. 1966, N. Dobrotworsky (ANIC). Paratypes: New South Wales: 2 O, Carrington Falls, 14. 9. 1987, G. Theischinger (GT); 2 O, Fitzroy Falls near Mittagong, Aug. 1965, D. Duckhouse (GT, MV); 3 O, Macquarie Pass, 13. 10. 1986, G. Theischinger and L. Müller (GT); 30 O, 10 Q, same locality, 14. 9. 1987, G. Theischinger (GT); 13 O, 5 Q, same locality, Nov. 1989, G.

Theischinger (GT); 3 °C, Minnamurra Falls, SE Mittagong, Aug. 1965, D. Duckhouse (GT, MV).

Distribution. New South Wales (SEN).

Name. Yumbera is an Australian Aboriginal word for "fly".

Subgenus Lyriomolophilus Theischinger (Fig. 15)

Molophilus gracilis group, M. ruficollis subgroup, sensu ALEXANDER (1927a, 1929b), in part.

Molophilus (Molophilus) lyratus group, sensu Theischinger (1988a).

Lyriomolophilus Theischinger, Stapfia 17: 202 (1988); as subgenus of Molophilus Curtis.

Type species: *Molophilus buckenbowra* THEISCHINGER 1988, by original designation. Definition. Male hypopygium with posterior margin of tergite 9 rather well sclerotized but

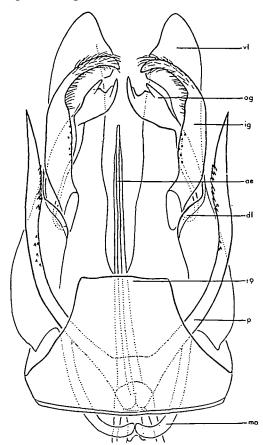


Fig. 15. Molophilus (Lyriomolophilus) leonardi sp. n., male hypopygium, dorsal aspect. Abbreviations: ae = aedeagus; dl = dorsal lobe of gonocoxite; ig = inner gonostylus; ma = mesodorsal apodeme of gonocoxite; og = outer gonostylus; p = parameres; t9 = tergite 9; vl = ventral lobe of gonocoxite.

unarmed. Gonocoxite long, slender; dorsal lobe barely developed, more or less a rounded corner, mesal lobe not developed, ventral lobe strongly developed with rounded or hook-shaped apex; mesodorsal apodeme of gonocoxite very long, reaching well beyond base of tergite 9, and strongly arched, leaving room for very extensive, long, fused but widely forked, lyriform parameres. Both gonostyli single-branched, of normal size, originating close together and rather far from the base of gonocoxite.

Distribution. Australia (eastern).

The Australian species of *Molophilus* (*Lyriomolophilus*)(in alphabetical order): alexanderorum sp. n.

barina Thei. bickeli sp. n. buckenbowra Thei. collessi Thei.

gingera Thei. keira Thei.

leonardi sp. n.

lyratus ALEX.

neboissi Thei.

neolyratus ALEX.

sublyratus ALEX. weringerong sp. n.

Molophilus (Lyriomolophilus) gingera Theischinger (Fig. 75)

Molophilus (Lyriomolophilus) gingera Theischinger, Stapfia 17: 205 (1988).

Primary type. Holotype O: New South Wales, A. C. T., Mt Gingera, 11. 1. 1967, D. H. Colless (ANIC); seen.

Published records. New South Wales. A. C. T., Mt Gingera (Theischinger 1988b: 205).

Previous illustrations. Theischinger 1988b: Fig.4.

Genitalia. Male hypopygium, Fig. 75.

Remarks. Similar to M. neolyratus ALEX., M. sublyratus ALEX. and M. weringerong sp. n. New records. None.

Distribution. New South Wales (SEN).

Molophilus (Lyriomolophilus) neolyratus Alexander (Fig. 76)

Molophilus neoyratus Alexander, Proc. Linn. Soc. N. S. W. 59: 185 (1934).

Molophilus (Lyriomolophilus) neolyratus Alexander; Theischinger, Stapfia 17: 208 (1988).

Primary type. Holotype O: New South Wales, Wentworth Falls, Blue Mts, 2840 ft, 20—30. 10. 1930, F. E. Wilson (MV, NMNH); seen. Published records. New South Wales: Wentworth Falls, Blue Mts, 2840 ft (ALEXANDER 1934: 186).

Previous illustrations. ALEXANDER 1934: Fig. 9; THEISCHINGER 1988b: Fig. 7.

Genitalia. Male hypopygium (Fig. 76) with the ventral lobe of gonocoxite relatively slender, terminating on mesal face in a small blunt lobe directed cephalad. Outer gonostylus bifid, the lateral arm stout and straight, the shorter inner or mesal arm black, gently curved, its tip obtuse. Inner gonostylus a simple, gently curved rod, gradually narrowed to the acute blackened tip, at extreme base a little expanded but not bearing a spine, as is the case in *M. lyratus* ALEXANDER; just before apex of style on inner face a few long setae; style slender, without a lateral flange, as in *M. sublyratus* ALEXANDER. Parameres lyriform, as in the subgroup; arms long and slender, entirely smooth.

Remarks. Similar to *M. gingera* Thei., *M. sublyratus* Alex. and *M. weringerong* sp. n. New records. None.

Distribution. New South Wales (SEN).

Molophilus (Lyriomolophilus) sublyratus Alexander (Fig. 77)

Molophilus sublyratus Alexander, Ann. Mag. nat. Hist. (10) 7: 161 (1931).

Molophilus (Lyriomolophilus) sublyratus Alexander; Theischinger, Stapfia 17: 208 (1988).

Primary type. Holotype O: Victoria, Ben Cairn, near Millgrove, in beech gully, 2900—3200 ft, 9. 2. 1929, F. E. Wilson (MV); seen.

Published records. Victoria: Beenak, near head of Bunyip River; Ben Cairn, near Millgrove, 2900—3200 ft; Healesville (all ALEXANDER 1931a: 162).

Genitalia. Male hypopygium, Fig. 77. Remarks. Similar to *M. gingera* Thei., *M. neolyratus* Alex. and *M. weringerong* sp. n. New records. Victoria: Beenak (MV). Distribution. Victoria.

Molophilus (Lyriomolophilus) weringerong spec. nov. (Fig. 78)

Description (O): Colouration: largely yellowish to greyish brown; head yellowish grey, antennae yellowish brown; wings and halteres pale greyish to brownish yellow; legs yellowish to pale greyish brown.

Dimensions. Wing length 5,0 mm.

Genitalia. Hypopygium, Fig. 78.

Remarks. Similar to *M. gingera* Thei. and *M. sublyratus* Alex. Diagnostic for *M. weringerong* are the branches of the parameres which are subapically significantly enlarged and bristly. Material examined. Holotype O: New South Wales, Fitzroy Falls, 2500 ft, 21. 10. 1966, N. Dobrotworsky (ANIC).

Distribution. New South Wales (SEN).

Name. Weringerong (Australian Aboriginal word for "lyre bird") refers to the lyra-shaped parameres.

Molophilus (Lyriomolophilus) barina Theischinger (Fig. 79)

Molophilus (Lyriomolophilus) barina Theischinger, Stapfia 17: 203 (1988).

Primary type. Holotype O: New South Wales, Mt Kosciusko, 10. 2. 1980, G. Theischinger (ANIC); seen.

Published records. New South Wales: Mt Kosciusko (Theischinger 1988b: 203).

Previous illustrations. Theischinger 1988b: Fig. 1.

Genitalia. Male hypopygium, Fig. 79.

Remarks. Similar to *M. bickeli* sp. n. and *M. keira* Thei.

New records. None.

Distribution. New South Wales (SEN).

Molophilus (Lyriomolophilus) bickeli spec. nov. (Fig. 80)

Description. Colouration: largely yellowish to

greyish brown; head brownish grey, antennae dark greyish yellow; mesonotum largely blackish grey; wings and halteres greyish yellow; legs greyish yellow to greyish brown, apex of femora and tibiae slightly darkened. Dimensions: Wing length, male 5,3 mm, female 5,2 mm.

Genitalia. Male hypogygium, Fig. 80.

Remarks. Most similar to *M. keira* THEI. Diagnostic for *M. bickeli* are the strongly arched outer and inner arm of the inner gonostylus and the smooth parameres.

Material examined. Holotype of: New South Wales, Gloucester Tops, 1280 m, Nothofagus forest, 4—30. 12. 1988, malaise trap, D. J. Bickel (ANIC). Paratype: New South Wales: 1 Q, same data as holotype (ANIC).

Distribution. New South Wales (NEN).

Name. This species is dedicated to Dr. D. J. Bickel in recognition of his continuous support for my studies of Tipulidae.

Molophilus (Lyriomolophilus) keira Theischinger (Fig. 81)

Molophilus (Lyriomolophilus) keira Theischinger, Stapfia 17: 206 (1988).

Primary type. Holotype O: New South Wales, 7. 3. 1967, I. F. B. Common (ANIC); seen.

Published records. New South Wales: Kanangra Creek; Mt Keira (both Theischinger 1988b: 206).

Previous illustrations. Theischinger 1988b: Fig.5.

Genitalia. Male hypopygium, Fig. 81.

Remarks. Similar to M. barina Thei. and M. bickeli sp. n.

New records. None.

Distribution. New South Wales (SEN).

Molophilus (Lyriomolophilus) buckenbowra Theischinger (Fig. 82)

Molophilus (Lyriomolophilus) buckenbowra Theischinger, Stapfia 17: 203 (1988).

Primary type. Holotype O: New South Wales, Buckenbowra River, 35°47'S/151°01'E, 14km W Batemans Bay, 26—27. 4. 1986, at light, G.

Theischinger (ANIC); seen.

Published records. New South Wales: Buckenbowra River, 14 km W Batemans Bay (Theischinger 1988b: 204).

Previous illustrations. Theischinger 1988b: Fig.2.

Genitalia. Male hypoygium, Fig. 82.

Remarks. Apparently smiliar to *M. lyratus* ALEX. New records. None.

Distribution. New South Wales (SEN).

Molophilus (Lyriomolophilus) lyratus Alexander

Molophilus lyratus Alexander, Ann. Mag. nat. Hist. (9) 19: 184 (1927).

Molophilus (Lyriomolophilus) lyratus Alexander; Theischinger, Stapfia 17: 208 (1988).

Primary type. Holotype O: Tasmania, Hobart, 13. 1. 1923, A. Tonnoir (ANIC); seen; genitalia missing.

Published records. Tasmania: Hobart (ALEX-ANDER 1927b: 186).

Genitalia. Male hypopygium relatively long and narrow, of very unusual structure. Tergite 9 large, arched, narrowed apically, appearing as a conical plate with the apex narrowly truncated. Form beneath this plate arises a remarkable lyriform chitinized structure (parameres) that presumably represents a phallosome, the two arms slender, narrowed gradually to the acute tips which jut caudad from between the tergal plate and the elongate gonocoxites. Gonocoxites ventral, slender, lying parallel and closely approximated, the apex of each obtuse, unarmed, provided with rather abundant delicate yellow setae. Outer gonostylus relatively small, the apex slender, blackened, a subbasal more flattened and obtuse arm of approximately equal length. Inner gonostylus a nearly straight powerful black rod, the extreme apex a little enlarged and provided with two or three obtuse teeth on the lower or inner face; lower face of style with a conspicuous sub-basal spine directed toward the apex of the style, the axil densely set with black spinuous pegs that extend in a row along the lower face of the style almost to the tip. Aedeagus slender, extending caudad to opposite

the tips of the lyre.

Remarks. A clear interpretation and an illustration of *M. lyratus* are not possible at the present; the species is apparently similar to *M. buckenbowra* THEI.

New records. None.

Distribution. Tasmania.

Molophilus (Lyriomolophilus) alexanderorum spec. nov. (Fig. 83)

Description(O). Colouration: largely greyish yellow to blackish brown; head grey, antennae yellowish brown; wings pale brownish yellow; foreleg greyish yellow with brownish grey subbasal ring on tibia, other legs missing.

Dimensions. Wing length 4,8 mm.

Genitalia. Hypopygium, Fig. 83.

Remarks. Not very similar to any other described species. Diagnostic for *M. alexanderorum* are the strongly curved branches of the parameres and the slightly curved, unarmed, inner gonostylus.

Material examined. Holotype of: Queensland, Dawson Creek, Mt Nebo, Brisbane, 12.9. 1972, A. M. Hemmingsen (ANIC).

Distribution. Queensland (SEQ).

Name. This species is dedicated to the late Prof. Dr. C. P. and Mrs M. Alexander in recognition of their outstanding efforts in the study of Tipulidae.

Molophilus (Lyriomolophilus) collessi Theischinger (Fig. 84)

Molophilus (Molophilus) collessi Theischinger, Stapfia 17: 177 (1988).

Molophilus (Lyriomolophilus) collessi Theischinger; Theischinger, Stapfia 17: 204 (1988).

Primary type. Holotype O: Queensland, 3 km N by E of Mt Tip Tree, 17° 02'S/145°37'E, 20. 10. 1980, at light, D. H. Colless (ANIC); seen. Published records. Queensland, 3 km N by E of Mt Tip Tree (Theischinger 1988a: 178).

Previous illustrations. The Schinger 1988a: Fig. 15; The Schinger 1988b: Fig. 3.

Genitalia. Male hypopygium, Fig. 84.

Remarks. Not very similar to any other described species.

New records. None.

Distribution. Queensland (NEQ).

Molophilus (Lyriomolophilus) leonardi spec. nov. (Fig. 85)

Description. Colouration: head and thorax dull yellow, antennae brownish grey; wings pale yellowish grey, halteres somewhat paler; coxae and trochanters yellow, remainder of legs greyish brown; abdomen brownish grey except for the terminal segment which is yellow.

Dimensions. Wing length, male 5,3—5,7 mm, female 5,5 mm.

Genitalia. Male hypopygium, Fig. 85.

Remarks. Most similar to M. collessi Thei. and M. barina Thei. Diagnostic for M. leonardi are the slightly produced apex of the ventral lobe of the gonocoxite and the inner gonostylus which is enlarged for the basal two thirds of its length and slender distally.

Material examined. Holotype of: Queensland, Carnarvon Gorge, 14.5. 1990, G. Theischinger (ANIC). Paratypes: Queensland: 1 of, 1 of, same data as holotype (ANIC, GT).

Distribution. Queensland (SIQ).

Name. This species is dedicated to Mr L. Müller, companion on many of my collecting trips.

Molophilus (Lyriomolophilus) neboissi Theischinger (Fig. 86)

Molophilus (Lyriomolophilus) neboissi Theischinger, Stapfia 17: 207 (1988).

Primary type. Holotype O: Victoria, Tanjil River, 5 km N of Moe, 6. 10. 1987, A. Neboiss; seen.

Published records. Victoria: Tanjil River, 5 km N of Moe (Theischinger 1988b: 207).

Previous illustrations. Theischinger 1988b: Fig.6.

Genitalia. Male hypopygium, Fig. 86.

Remarks. Not very similar to any other described species.

New records. None.

Distribution. Victoria.

Subgenus Molophilus Curtis (Figs 16—18)

Molophilus Curtis, British Entomology 10: 444 (1833).

Type species. *Molophilus brevipennis* Curtis 1833, by original designation.

Definition. Male hypopygium with posterior margin of tergite 9 generally not strongly sclerotized and never armed. The three lobes of gonocoxite variably developed, the dorsal lobe without a dorsal appendage; mesodorsal apodeme of gonocoxite not reaching base of tergite 9. Both gonostyli single—branched, of normal size, originating close together and rather close to the base of gonocoxite. Parameres generally fused, exceptionally almost completely divided but the two halfes not connected to the mesal face of gonocoxites.

Distribution. See above, under genus *Molophilus* Curtis.

The species groups of *Molophilus* (*Molophilus*) in Australia:

M. flavoannulatus group

M. gracilis group

M. plagiatus group

(key presented above under "Genus *Molophilus* Curtis").

Molophilus (Molophilus) flavoannulatus group (Fig. 16)

Molophilus gracilis group, M. ruficollis subgroup, sensu ALEXANDER (1927a, 1929b), in part.

Molophilus (?Molophilus), sensu Theischinger (1988a).

Definition. Male hypopygium with only the ventral lobe of gonocoxite prominent but without apical beak of hook. Parameres divided into two halfes that are narrowly connected at the midline and are not positioned along and connected to the mesal face of gonocoxites.

Distribution in Australia. South—western.

The Australian species of the *Molophilus* (*Molophilus*) flavoannulatus group (in alphabetical order):

flavoannulatus ALEX..

mimicus ALEX.

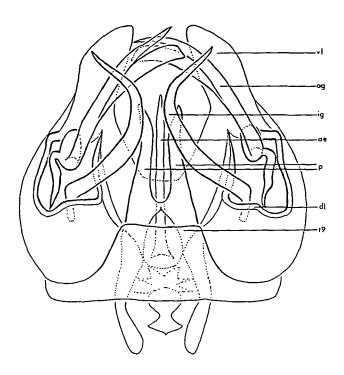


Fig. 16. Molophilus (Molophilus) mimicus Alexander, male hypopygium, dorsal aspect. Abbreviations: ae = aedeagus; dl = dorsal lobe of gonocoxite; ig = inner gonostylus; og = outer gonostylus; p = parameres; t9 = tergite 9; vl = ventral lobe of gonocoxite.

Molophilus (Molophilus) flavoannulatus Alexander (Fig. 87)

Molophilus flavoannulatus Alexander, Ann. Mag. nat. Hist. (9) 19: 29 (1927).

Molophilus (?Molophilus) flavoannulatus Alexander; Theischinger, Stapfia 17: 195 (1988).

Primary type. Holotype O: Western Australia, Swan River, J. Clarke (MV, NMNH); seen. Published records. Western Australia: Swan River (ALEXANDER 1927a: 30); Yunderup, S of Mandurah (Theischinger 1988a: 195).

Previous illustrations. Theischinger 1988a: Fig.37.

Genitalia. Male hypopygium, Fig. 87. Remarks. Similar to M. mimicus ALEX.

New records. None.

Distribution. Western Australia (SWA).

Molophilus (Molophilus) mimicus Alexander (Fig. 88)

Molophilus mimicus Alexander, Ann. Mag. nat. Hist. (10) 3: 336 (1929).

Molophilus (?Molophilus) mimicus Alexander; Theischinger, Stapfia 17: 195 (1988).

Primary type. Holotype O: Western Australia, Pemberton, 28. 8. 1926, E. W. Ferguson (supposedly in ANIC, but apparently lost); not seen.

Published records. Western Australia: Pemberton (ALEXANDER 1929a: 337); Piesse Brook, Kalamunda (Theischinger 1988a: 196). Previous illustrations. Theischinger 1988a: Fig.38.

Genitalia. Male hypopygium, Fig. 88.

Remarks. Similar to M. flavoannulatus ALEX. New records. Western Australia: Crawley (ANIC); Gingin (ANIC).

Distribution. Western Australia (SWA).

Molophilus (Molophilus) gracilis group (Fig. 17)

Molophilus gracilis group (M. gracilis subgroup + M. ruficollis subgroup) + Molophilus verticalis group, sensu ALEXANDER (1927a, 1929b), in part.

Molophilus (M.) gracilis group + Molophilus (M.) ruficollis group + Molophilus (M.) verticalis group, sensu Theischinger (1988a).

Definition. Male hypopygium with the three lobes of gonocoxite variably developed, the ventral lobe never prominent and never with apical beak or hook. Parameres fused.

Remarks. As pointed out earlier (Theischinger 1988a), Alexander (1978) mixed up outer and inner gonostylus in his description and illustration of *M. multispicatus* Alexander. This was credited to the method of preservation of the holotype of this species. However, it appears now that Alexander mixed up outer and inner gonostylus in his descriptions of most - if not all - Australian species of the *M. gracilis* group, *M. gracilis* subgroup, sensu Alexander (1927a, 1929b). Alexander's original descriptions used for this paper have been edited in this respect.

Distribution in Australia. Eastern and south—western.

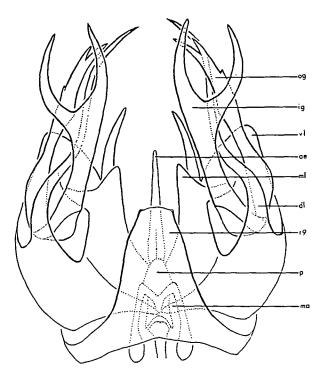


Fig. 17. Molophilus (Molophilus) karta sp. n., male hypopygium, dorsal aspect. Abbreviations: ae = aedeagus; dl = dorsal lobe of gonocoxite; ig = inner gonostylus; ma = mesodorsal apodeme of gonocoxite; ml = mesal lobe of gonocoxite; og = outer gonostylus; p = parameres; t9 = tergite 9; vl = ventral lobe of gonocoxite.

The Australian species of the Molophilus (Molophilus) gracilis group (in alphabetical order):

aciferus ALEX. aequistylus ALEX. alpicola ALEX. amiculus ALEX. ampliatus ALEX. annexus ALEX. aphanta ALEX. apricus ALEX. auriculifer Thei. bawbawiensis ALEX. bubbera sp. n. bunyipenis ALEX. capitatus ALEX. cerberus ALEX. chloris ALEX. christine Thei. congregatus ALEX. difficilis ALEX.

dorriganus ALEX. dosolobatus Thei. drepanostylus ALEX. erebus Alex. expansus ALEX. exsertus ALEX. extensicornis ALEX. extricatus ALEX. fergusonianus ALEX. flavocingulatus ALEX. forceps ALEX. gracilis Skuse grampianus ALEX. gununo sp. n. horridus ALEX. iluka sp. n. immutatus ALEX. insertus sp. n. karta sp. n. lucidipennis Skuse macleayanus ALEX. maigamaigawa sp. n. mancus ALEX. maroondah sp. n. mattina sp. n. megacanthus ALEX. micracantha ALEX. mjobergi ALEX. morulus ALEX. multicurvatus Thei. multispicatus ALEX. opulus ALEX. paratetrodonta sp. n. parerebus sp. n. permutatus ALEX. persernus ALEX. pictor ALEX. pita sp. n. poliocephalus ALEX. praelatus ALEX. rasilis ALEX. reductus ALEX. riawunna sp. n. ruficollis Skuse scaber ALEX. sigma ALEX. spiculistylatus ALEX. strix ALEX. suavis ALEX.

dobrotworskyi sp. n.

subalpicola ALEX. subhorridus Alex. tasioceroides ALEX. tenuiclavus ALEX. tetrodonta ALEX. tortilis ALEX. trigonalis ALEX. tripectinatus ALEX. trispinosus sp. n. tristylus ALEX. unispinosus ALEX. variistylus ALEX. verticalis ALEX. vividus ALEX. vulpinus ALEX. wadna sp. n. wilsoni ALEX. yabbie sp. n.

Molophilus (Molophilus) aequistylus Alexander (Fig. 89)

Molophilus aequistylus Alexander, Ann. Mag. nat. Hist. (9) 20: 45 (1927).

Molophilus setulistylus Alexander, Ann. Mag. nat. Hist. (9) 20: 47 (1927).

Primary types. Holotype of of M. aequistylus ALEXANDER: Tasmania, Burnie, 27. 10. 1927, A. Tonnoir (ANIC); seen. Holotype of of M. setulistylus ALEXANDER: New South Wales, Fish River, Blue Mts 25. 3. 1923, E.W. Ferguson (ANIC); seen.

Published records. New South Wales: Blackheath, Blue Mts, 3500 ft; Fish River, Blue Mts(both Alexander 1927c: 48). Victoria: Lower Tarwin (Alexander 1927c: 47). Tasmania: Burnie; Hobart; National Park (all Alexander 1927c: 46).

Genitalia. Male hypopygium, Fig. 89.

Remarks. Similar to M. drepanostylus ALEX. and M. tenuiclavus ALEX.

New records. New South Wales: Alpine Creek, Snowy Mts Highway (ANIC); Blue Mts (ANIC); Blundells, A. C. T. (ANIC); Brown Mt, Bega District (ANIC); Lee's Spring, A. C. T. (ANIC); Fish River, Blue Mts (ANIC). Victoria: Buckland's, Gippsland (ANIC); Cabbanah, 1340 ft (ANIC); Culloden, 320 ft (ANIC); Harrietville (ANIC); 17 mi. SW Lake

Mtn, 3000 ft (ANIC); Warburton (NMNH). Distribution. New South Wales (SEN), Victoria, Tasmania.

Molophilus (Molophilus) drepanostylus Alexander (Fig. 90)

Molophilus drepanostylus Alexander, Proc. Linn. Soc. N. S. W. 59: 182 (1934).

Primary type. Holotype of: New South Wales, Dorrigo, eastern Dorrigo, ca. 2000 ft, 12. 4. 1931, W. Heron (NMNH); seen.

Published records. New South Wales: Dorrigo, eastern Dorrigo, ca. 2000 ft (ALEXANDER 1934: 183).

Previous illustrations. ALEXANDER 1934: Fig. 5. Genitalia. Male hypopygium (Fig. 90) with the dorsal spine of gonocoxite long and slender, gently curved; ventral lobe of gonocoxite slender but much smaller than in *M. aequistylus* ALEX. or *M. tenuiclavus* ALEX. Outer gonostylus a strongly curved rod that is roughly sickle—shaped, the tip acute, the surface with a few scattered punctures. Inner gonostylus of nearly the same length, relatively slender, the surface, except at base and apex, with microscopic setulae.

Remarks. Similar to M. aequistylus ALEX. and M. tenuiclavus ALEX.

New records. New South Wales: 11 mi. E Ebor, 4800 ft (ANIC).

Distribution. New South Wales (NEN).

Molophilus (Molophilus) tenuiclavus Alex-Ander (Fig. 91)

Molophilus tenuiclavus Alexander, Ann. Mag. nat. Hist. (9) 20: 44 (1927).

Molophilus truncatus Alexander, Ann. Mag. nat. Hist. (10) 5: 384 (1930).

Primary types. Holotype of of M. tenuiclavus ALEXANDER: New South Wales, Narara, 3. 11. 1921, A. Tonnoir (ANIC); seen. Holotype of of M. truncatus ALEXANDER: Victoria, Melton, 27. 5. 1928, F. E. Wilson (MV); seen.

Published records. New South Wales: Narara (ALEXANDER 1927c: 44). Victoria: Clarkefield; Melton (both ALEXANDER 1930: 384).

Genitalia. Male hypopygium, Fig. 91.

Remarks. According to ALEXANDER (1930c) M. truncatus ALEX. is most closely allied to M. tenuiclavus, according to ALEXANDER (1931b) M. bawbawienis is most closely allied to M. tenuiclavus, and according to ALEXANDER (1944) M. mancus ALEX. shows several points of resemblance to M. truncatus ALEX. and its allies. In my opinion, M. tenuiclavus is not similar to M. bawbawiensis and M. mancus; it is, however, similar to M. aequistylus ALEX. and M. drepanostylus ALEX.

New records. Queensland: Atherton (NMNH); Blackall Range (NMNH). New South Wales: Dorrigo (NMNH); Hacking River, Picnic Flat (GT); Mt Kaputar, Bullana Creek (GT); Megalong Valley (NMNH); Murrumbidgee River (NMNH); New England National Park (ANIC). Victoria: Bells Clearing, 6 km S of Aberfeldy (MV); Cape Otway (MV); Crowe's (NMNH); Eltham (NMNH); Genoa River, near Wangerabell (MV); Grampians (NMNH); Latrobe River, Tanjil River Bridge (MV); Macedon (NMNH); 3 km SE Taggerty, Little River (MV); Trafalgar (NMNH); Walhalla (NMNH); Yarra River, 4 km SW Healesville (MV); Yarra River, 2 km N of Wong Park (MV). Tasmania: Gordon River, 2 km above Florentine River jn (MV); Gordon River, 1/2 km above Sprent River in (MV); National Park (NMNH). South Australia: Tungkillo (MV). Distribution. Queensland (NEQ, SEQ), New South Wales (NEN, SEN), Victoria, Tasmania, South Australia (SES).

Molophilus (Molophilus) pita spec. nov. (Fig. 92)

Description(\mathcal{O}). Colouration: largely greyish brown; head grey; wings pale greyish brown, halteres almost white; legs dark greyish brown. Dimensions. Wing length 4,5—5,0 mm. Genitalia. Hypopygium, Fig. 92.

Remarks. Not similar to any other described species. The length and thickness of the single elements of the hypoygium were found somewhat variable. Diagnostic for *M. pita* is the small appendage on the mesal lobe of the gonocoxite.

Material examined. Holotype of: New South Wales, Pretty Creek, Mt Kosciusko, 5300 ft, 10. 12. 1931, collector unknown (ANIC). Paratypes: New South Wales: 2 of, Diggers Creek, Mt Kosciusko 5300 ft, 10. 12. 1931, collector unknown (ANIC, GT). Distribution. New South Wales (SEN).

Name. Pita (Australian Aboriginal word for "bamboo spear with four points") refers to the shape of the inner gonostylus.

Molophilus (Molophilus) difficilis ALEXAN-DER (Fig. 93)

Molophilus difficilis Alexander, Ann. Mag. nat. Hist. (9) 20: 34 (1927).

Primary type. Holotype O: Tasmania, probably Hobart, 1924, G. H. Hardy (QM); not seen. Published records. Tasmania: ?Hobart (ALEXANDER 1927c: 35).

Genitalia. Male hypopygium, Fig. 93. Remarks. Very similar to *M. exsertus* ALEX., *M. insertus* sp. n. and *M. spiculistylatus* ALEX. New records. Tasmania: Mt Wellington (NMNH).

Distribution. Tasmania.

Molophilus (Molophilus) exsertus Alexander (Fig. 94)

Molophilus exsertus Alexander, Ann. Mag. nat. Hist. (9) 20: 36 (1927).

Primary type. Holotype O: Tasmania, Wilmot, 8. 1. 1923, A. Tonnoir (ANIC); seen. Published records. Tasmania: Burnie; Wilmot (both ALEXANDER 1927c: 37).

Genitalia. Male hypopygium, Fig. 94.

Remarks. Very similar to M. difficilis ALEX., M. insertus sp. n. and M. spiculistylatus ALEX. New records. New South Wales: Alpine Creek, Snowy Mts Highway (ANIC); Kiandra, 4500 ft (ANIC). Victoria: Alfred National Park (ANIC); Bell Bird (NMNH); Bonang (NMNH); Cabbanah, 1340 ft (ANIC); Dandenongs, Sherbrooke Forest (MV); Ferntree Gully (MV); Grampians, Delleys Dell (MV); Healesville (NMNH); Hospital Creek (ANIC); 13 mi. SE Hotham, 4900 ft (ANIC); Maroondah (ANIC),

Millgrove (NMNH); 12 mi. W Neerim (MV); Sassafras (MV); Toorongo Falls (ANIC); 11 mi. S Treasure's, 4060 ft (ANIC); Warburton (NMNH); Wilson's Promontory, Chinaman's Creek (ANIC). Tasmania: Burnie (NMNH); Patrick River (NMNH); Scottsdale (NMNH). Distribution. New South Wales (SEN), Victoria, Tasmania.

Molophilus (Molophilus) spiculistylatus ALEX-ANDER (Fig. 95)

Molophilus spiculistylatus Alexander, Ann. Mag. nat. Hist. (10) 5: 383 (1930).

Primary type. Holotype O: Victoria, Bogong High Plains, 5600—6000 ft, Jan. 1928, F. E. Wilson (MV); seen; genitalia missing. Published records. Victoria: Bogong High Plains, 5600—6000 ft (ALEXANDER 1930: 383). Genitalia. Male hypopygium, Fig. 96. Remarks. Very similar to M. difficilis ALEX., M. exsertus ALEX. and M. insertus sp. n. New records. Victoria: Bogong, Howmans (ANIC); Lake Mtn (ANIC). Distribution. Victoria.

Molophilus (Molophilus) insertus spec. nov. (Fig. 96)

Description(O). Colouration: largely greyish brown: head grey, antennae brown; wings pale greyish brown with slightly darker patch, halteres dull yellow; legs yellowish to greyish brown.

Dimensions. Wing length 4,8—5,3 mm. Genitalia. Hypopygium, Fig. 95.

Remarks. Similar to *M. difficilis* ALEX. and *M. exsertus* ALEX., very similar to *M. spiculistylatus* ALEX. Diagnostic for *M. insertus* are the almost equal length of both gonostyli, and the spiculate apex of the outer gonostylus.

Material examined. Holotype σ : Victoria, Otway Ranges, Turtons Pass, May 1961, D. Duckhouse (MV). Paratypes: Victoria: 2 σ , same data as holotype (MV); 4 σ , type locality, June 1961, D. Duckhouse (GT, MV); 3 σ ,

Otway Ranges, Maits Rest, May 1960, D. Duckhouse (GT, MV).

Distribution. Victoria.

Name. Insertus (Latin for "placed among") refers to the great similarity to the species mentioned under "Remarks".

Molophilus (Molophilus) megacanthus ALEX-ANDER (Fig. 97)

Molophilus megacanthus Alexander, Proc. Linn. Soc. N. S. W. 59: 181 (1934).

Primary type. Holotype O: New South Wales, Wentworth Falls, Blue Mts, 2840 ft, 20—30. 10. 1930, F. E. Wilson (MV); seen; genitalia missing.

Published records. New South Wales: Blackheath, Blue Mts, 3495 ft; Wentworth Falls, Blue Mts, 2840 ft (both ALEXANDER 1934: 182).

Previous illustrations. ALEXANDER 1934: Fig. 4. Genitalia. Male hypopygium, Fig. 97. Remarks. Similar to *M. wadna* sp. n. New records. New South Wales: Bulli (GT). Distribution. New South Wales (SEN).

Molophilus (Molophilus) wadna spec. nov. (Fig. 98)

Description(O). Colouration: largely dark yellowish to reddish brown; head greyish brown, antennae yellowish brown; wings pale yellowish brown, halteres yellowish brown to whitish grey; legs yellowish to greyish brown.

Dimensions. Wing length 4,4 mm.

Genitalia. Hypopygium, Fig. 98.

Remarks. Most similar to *M. megacanthus* ALEX. Diagnostic for *M. wadna* is the widely arched, sickle—shaped, inner gonostylus.

Material examined. Holotype O: New South Wales, near Barren Ground, 13. 10. 1986, G. Theischinger and L. Müller (ANIC).

Distribution. New South Wales (SEN).

Name. Wadna (Australian Aboriginal word for "boomerang") refers to the shape of the inner gonostylus.

Molophilus (Molophilus) horridus Alexander (Fig. 99)

Molophilus horridus Alexander, Ann. Mag. nat. Hist. (9) 20: 38 (1927).

Primary type. Holotype of: Tasmania, National Park, 16. 2. 1922, A. Tonnoir (ANIC); seen. Published records. Victoria: Sassafras, Dandenong Range, 1000 ft (Alexander 1927c: 39). Tasmania: National Park (ALEXANDER 1927c: 39).

Genitalia. Male hypopygium, Fig. 99.

Remarks. Very similar to *M. subhorridus* ALEX. New records. Victoria. Acheron River (GT); Beenak (NMNH); Bulga National Park (MV); Dandenongs, Olinda Creek (MV); Dandenongs, Sherbrooke Forest (MV); Ferntree Gully (MV); Sassafras (AM, MV); Warburton (NMNH). Distribution. Victoria, Tasmania.

Molophilus (Molophilus) subhorridus Alexander (Fig. 100)

Molophilus subhorridus Alexander, Ann. Mag. nat. Hist. (10) 7: 159 (1931).

Primary type. Holotype of: Victoria, Ben Cairn, near Millgrove, in beech gully, 2900—3000 ft, 9. 2. 1929, F. E. Wilson (MV); seen.

Published records. Victoria: Ben Cairn, near Millgrove, 2900—3000 ft; Mt Donna Buang, 3000—3800 ft (both ALEXANDER 1931a: 160). Genitalia. Male hypopygium, Fig. 100.

Remarks. Very similar to *M. horridus* ALEX. New records. New South Wales: Bull's Head, Brindabella Range, A. C. T. (AM). Victoria: Walhalla (NMNH).

Distribution. New South Wales (SEN), Victoria.

Molophilus (Molophilus) fergusonianus Alexander (Fig. 101)

Molophilus fergusonianus Alexander, Ann. Mag. nat. Hist. (9) 20: 39 (1927).

Molophilus (Molophilus) fergusonianus Alexander; Theischinger, Stapfia 17: 176 (1988).

Primary type. Holotype of: New South Wales,

Sydney, 2. 12. 1923, E. W. Ferguson (ANIC); seen; genitalia missing.

Published records. Queensland: Beerburrum Creek, Beerburrum (Theischinger 1988a: 176). New South Wales: Black Mtn, A. C. T. (Theischinger 1988a: 177); Sydney (Alexander 1927c: 40).

Previous illustrations. Theischinger 1988a: Fig.14.

Genitalia. Male hypopygium, Fig. 101.

Remarks. Very similar to M. gracilis Skuse, M. karta sp. n. and M. multispicatus ALEX.

New records. Queensland: Eripah Creek, Mt Cotton, NE Birsbane (NMNH); Samford Valley, 14 mi. WNW Brisbane (NMNH). Victoria: Bendigo (NMNH); Kongwak (ANIC); Violet Town (ANIC).

Distribution. Queensland (SEQ), New South Wales (SEN), Victoria.

Molophilus (Molophilus) karta spec. nov. (Fig. 102)

Description. Colouration: largely dark greyish brown; head grey, antennae greyish brown; wings greyish brown with darker patch, halteres greyish yellow to brownish grey; legs yellowish to greyish brown.

Dimensions. Wing length, male 4,5 mm, female 4,6 mm.

Genitalia. Male hypopygium, Fig. 102.

Remarks. Most similar to *M. fergusonianus* ALEX. Diagnostic for *M. karta* is the almost straight outer gonostylus.

Material examined. Holotype O: Victoria, Kangaroo Island, Rocky River, 27. 6. 1972, collector unknown (ANIC). Paratypes: Victoria: 1 O, same data as holotype (GT); 1 Q, type locality, 25. 5. 1972, collector unknown (ANIC). Distribution. Victoria.

Name. Karta (Australian Aboriginal name for Kangaroo Island) refers to the type locality and is to be regarded as an undeclinable noun in apposition to the generic name.

Molophilus (Molophilus) gracilis Skuse (Fig. 103)

Molophilus gracilis Skuse, Proc. Linn. Soc. N. S. W. 4: 808 (1890).

Molophilus gracilis Skuse; Alexander, Proc. Linn. Soc. N. S. W. 54: 143 (1929).

Molophilus (Molophilus) gracilis Skuse; Alexander, Studia ent. 20: 171 (1978).

Molophilus (Molophilus) gracilis Skuse; Theischinger, Stapfia 17: 175 (1988).

Primary type. Lectotype O: New South Wales, no more data available (ANIC); seen.

Published records. Queensland: Julatten (Theischinger 1988a: 175). New South Wales (Skuse 1890: 808; Theischinger 1988a: 175). Victoria (Theischinger 1988a: 175). Tasmania (Theischinger 1988a: 175).

Previous illustrations. Alexander 1929b: Fig. 9; Alexander 1978: Fig. 57; Theischinger 1988a: Fig. 12.

Genitalia. Male hypopygium, Fig. 103.

Remarks. Similar to M. fergusonianus ALEX., M. karta sp. n. and M. multispicatus ALEX. New records. Queensland: Eripah Ck, NE Mt Cotton, Brisbane (NMNH); Noosa River, Cooloola National Park (GT). New South Wales: Audley (GT); Batemans Bay (ANIC); Blundell's, A. C. T. (ANIC); Bowral (ANIC); Brooklana, eastern Dorrigo (NMNH); Bulli (GT); Dorrigo (NMNH); Engadine (GT); Gibraltar Range National Park (AM); Macquarie Pass (GT); Sydney (ANIC, NMNH); Uloola Ck, Royal National Park (GT). Victoria: Toorongo Falls (ANIC); Tyers River (MV).

Molophilus (Molophilus) multispicatus ALEX-ANDER (Fig. 104)

Distribution. Queensland (NEQ, SEQ), New

South Wales (NEN, SEN), Victoria, Tasmania.

Molophilus multispicatus Alexander, Studia ent. 20: 171 (1978).

Molophilus (Molophilus) multispicatus Alexander; Theischinger, Stapfia 17: 175 (1988).

Primary type. Holotype O: Queensland, Atherton, Nov. 1972. Hemmingsen (NMNH); seen.

Published records. Queensland: Atherton (ALEXANDER 1978: 171); 7 km N of Hope Vale Mission; 5 km W by N of Rounded Hill; Mt Cook National Park; 1 km S of Mt Cook (all THEISCHINGER 1988a: 176).

Previous illustrations. Alexander 1978: Fig. 51; Theischinger 1988a: Fig. 13.

Genitalia. Male hypopygium, Fig. 104.

Remarks. Similar to *M. fergusonianus* ALEX., *M. gracilis* SKUSE and *M. karta* sp. n. As pointed out earlier (THEISCHINGER 1988a), the position of the gonostyli in the holotype has obviously been inverted by the method of preparation and was illustrated and described accordingly by ALEXANDER (1978).

New records. None.

Distribution. Queensland (CY, NEQ).

Molophilus (Molophilus) extricatus Alexander (Fig. 105)

Molophilus extricatus Alexander, Ann. Mag. nat. Hist. (10) 5: 381 (1930).

Primary type. Holotype of: Victoria, Bogong High Plains, 5600—6000 ft, Jan. 1928, F. E. Wilson (MV); seen; genitalia missing.

Published records. Victoria: Bogong High Plains, 5600—6000 ft (ALEXANDER 1930: 382). Genitalia. Male hypopygium, Fig. 105.

Remarks. Very similar to *M. morulus* ALEX., similar to *M. christine* THEI. According to ALEXANDER (1930c) the relationship to *M. flavocingulatus* ALEX. is marked.

New records. Victoria: Bogong High Plains (ANIC).

Distribution. Victoria.

Molophilus (Molophilus) flavocingulatus Alexander

Molophilus flavocingulatus Alexander, Proc. Linn. Soc. N. S. W. 53: 69 (1928).

Primary type. Holotypeo: New South Wales, Barrington Tops, on *Leptospermum*, Allyn Range, Feb. 1925, S. U. Zool. Exp. (ANIC); seen; genitalia missing.

Published records. New South Wales: Barrington Tops, Allyn Range (ALEXANDER 1928: 70). Genitalia. Male hypopygium with the dorsal lobe of the gonocoxite prolonged into a conspicuous acute spine, the basal three—fifths stouter, setiferous, the distal spine yellowish horn-colour, the tip acute; ventral lobe of gonocoxite small, fleshy, shorter and smaller than the mesal lobe, the mesal face with relatively few conspicuous setae; mesal lobe of gonocoxite large and fleshy, with scattered setae and abundant microsopic setulae. Outer gonostylus of very peculiar form, attached laterally, the mesal end produced into a flattened, obtusely rounded blade, the lateral end soon bent at a right angle into a long, slender, nearly straight black spine that is about twice as long as the dorsal spine of the gonocoxite, its surface roughened. Inner gonostylus a long vellow rod. gently sinuous, beyond midlength on the outer face bearing a long, curved, black spine; apex of the style a spear—shaped dusky head. Aedeagus relatively long and slender, in slides extending caudad to beyond the level of the mesal lobe of the gonocoxite.

Remarks. ALEXANDER (1930c) saw a marked relationship of *M. flavocingulatus* to *M. extricatus* ALEX. Fresh material for a clear interpretation and illustration of *M. flavocingulatus* is not available.

New records. None.

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Distribution. New South Wales (NEN).

Molophilus (Molophilus) morulus Alexander (Fig. 106)

Molophilus morulus Alexander, Ann. Mag. nat. Hist. (10) 3: 338 (1929).

Primary type. Holotype of: Victoria, Ringwood, 400 ft, 4. 9. 1927, C. Barrett (NMNH); seen. Published records. Victoria: Ringwood, 400 ft (ALEXANDER 1929a: 339).

Genitalia. Male hypopygium, Fig. 106.

Remarks. Very similar to M. extricatus ALEX., similar to M. christine Thei.

New records. Victoria: Millgrove, Dee Creek, 500—1000 ft (NMNH).

Distribution, Victoria.

Molophilus (Molophilus) reductus Alexander (Fig. 107)

Molophilus verticalis reductus Alexander, Ann. Mag. nat. Hist. (9) 19: 195 (1927).

Molophilus (Molophilus) reductus Alexander; Theischinger, Stapfia 17: 194 (1988).

Primary type. Holotype of: Tasmania, Cradle Valley, 12. 1. 1923, A.Tonnoir (ANIC); seen. Published records. Tasmania: Cradle Valley (ALEXANDER 1927b: 195).

Genitalia. Male hypopygium, Fig. 107.

Remarks. Very similar to *M. verticalis* ALEX. New records. Victoria: Cape Otway (MV). Tasmania: Sandfly Creek, at Scotts Peak Road, 42° 54'S/146°22'E (MV).

Distribution. Victoria, Tasmania.

Molophilus (Molophilus) verticalis Alexander (Fig. 108)

Molophilus verticalis Alexander, Ann. Mag. nat. Hist. (9) 19: 194 (1927).

Molophilus (Molophilus) verticalis Alexander; Theischinger, Stapfia 17: 194 (1988).

Primary type. Holotype O: Tasmania, Fern Tree, Mt Wellington, 11. 11. 1922, A. Tonnoir (ANIC); seen.

Published records. Tasmania: Burnie; Cradle Valley; Eaglehawk Neck; Fern Tree, Mt Wellington; Mt Field; Hartz Mts; National Park; St Patrick River; Mt Wellington (all ALEXANDER 1927b: 195).

Genitalia. Male hypopygium, Fig. 108.

Remarks. Very similar to *M. reductus* ALEX. New records. New South Wales: Mooraback, Werrikimbi National Park (GT); Nadgee State Forest, Maxwell's Creek (GT). Victoria: Beaconsfield (NMNH); Ben Cairn (ANIC); Buckland's, Gippsland (ANIC); Noojee (ANIC); Warragul (NMNH); Woori Yallock (NMNH); Yae River, 7 km S of Glenburn (MV). Tasmania: Helyer Gorge (ANIC); Lake St Clair (ANIC); Mt Wellington (NMNH); Sandfly Creek, at Scotts Peak Road, 42°54'S/146°22'E (MV).

Distribution: New South Wales (NEN), Victoria, Tasmania.

Molophilus (Molophilus) christine Theischinger (Fig. 109)

Molophilus (Molophilus) christine Theischinger, Stapfia 17: 194 (1988).

Primary type. Holotype of: Queensland, Searys Creek, near Rainbow Beach, 9. 1. 1986, at light, C., D. and G. Theischinger (ANIC); seen.

Published records. Queensland: Searys Creek, near Rainbow Beach (Theischinger 1988a: 194). Previous illustrations. Theischinger 1988a: Fig. 36.

Genitalia. Male hypopygium, Fig. 109.

Remarks. Similar to M. extricatus ALEX., M. morulus ALEX. and possibly M. flavocingulatus ALEX.

New records. Queensland: Searys Creek, near Rainbow Beach (GT).

Distribution. Queensland (SEQ).

Molophilus (Molophilus) vulpinus Alexander (Fig. 110)

Molophilus vulpinus Alexander, Ann. Mag. nat. Hist. (10) 3: 337 (1929).

Primary type. Holotype O: Victoria, Ringwood, ca. 400 ft,4.9.1927, C.Barrett (NMNH); seen Published records. Victoria: Ringwood, ca. 400ft (ALEXANDER 1929 a: 338).

Genitalia. Male hypopygium, Fig. 110.

Remarks. Not very similar to any other described species. Possibly closest to the group around *M. christine* THEI. (see there).

New records. Victoria: Croyden (NMNH); Dromana (NMNH); 5 mi. N Foster (ANIC); Maroondah (ANIC); Sherbrooke (ANIC). Distribution. Victoria.

Molophilus (Molophilus) aphanta Alexander (Fig. 111)

Molophilus aphanta Alexander, Ann. Mag. nat. Hist. (9) 20: 41 (1927).

Molophilus grandidentatus Alexander, Ann. Mag. nat. Hist. (10) 5: 384 (1930).

Primary types. Holotype of of M. aphanta

ALEXANDER: Victoria, Sassafras, Dandenong Range, 1000 ft, 19. 10. 1922, A. Tonnoir (ANIC); seen; genitalia missing. Holotype of *M. grandidentatus* ALEXANDER: Victoria, Belgrave, in dark fern gully, 13. 1. 1929, F. E. Wilson (MV); seen.

Published records. Victoria: Belgrave (ALEXANDER 1930: 384); Sassafras, Dandenong Range, 1000 ft (ALEXANDER 1927c: 42).

Genitalia. Male hypopygium, Fig. 111.

Remarks. Not very similar to any other described species. Possibly closest to *M. dobrotworskyi* sp. n.

New records. Victoria: Beech Forest (NMNH); Beenak (NMNH); Bellel Creek, near Marysville (GT); Cement Creek (ANIC); Cumberland Creek (ANIC); Dandenongs, Kallista (MV); Ferntree Gully (MV); Maroondah (ANIC); Mt Donna Buang, 3000—3800 ft (NMNH); Olinda (NMNH); Sassafras (MV); Sherbrooke (ANIC); Warburton (NMNH).

Distribution. Victoria.

Molophilus (Molophilus) dobrotworskyi spec. nov. (Fig. 112)

Description(O). Colouration: largely greyish brown; head dark brownish grey, antennae brown; wings and halteres brownish grey; coxae and trochanters greyish yellow, remainder of legs brownish grey.

Dimensions. Wing length 3,8—4,1 mm.

Genitalia. Hypopygium, Fig. 112.

Remarks. Somewhat similar to *M. aphanta* ALEX. Diagnostic for *M. dobrotworskyi* is the unusual forwardly directed, double-branched, inner gonostylus.

Material examined. Holotype O: Victoria, Wilson's Promontory, Tea Tree Swamp, 19. 11. 1964, N. Dobrotworsky (ANIC). Paratypes. Victoria: 2 O, same data as holotype (ANIC; GT).

Distribution. Victoria.

Name. This species is dedicated to the late Dr. N. V. Dobrotworsky, outstanding student of Australian Tipulidae.

Molophilus (Molophilus) paratetrodonta spec. nov. (Fig. 113)

Description(O). Colouration: largely yellowish to greyish brown; head dark brownish grey, antennae greyish yellow; wings yellowish grey, halteres pale greyish yellow; legs greyish yellow to greyish brown, apex of femora, and base and apex of tibiae darkened.

Dimensions. Wing length 3,2—3,5 mm. Genitalia. Hypopygium, Fig. 113.

Remarks. Very similar to M. tetrodonta ALEX. Diagnostic for M. paratetrodonta is the long subapical spine of the inner gonostylus.

Material examined. Holotype O: New South Wales, Mooraback, Werrikimbe National Park, 980 m, 6. 12. 1986, G. Theischinger (ANIC). Paratypes: New South Wales: 3 O, same data as holotype (GT).

Distribution. New South Wales (NEN).

Name. Paratetrodonta (para = Greek for ,,close by") refers to the marked similarity to M. tetrodonta ALEX.

Molophilus (Molophilus) tetrodonta ALEXAN-DER (Fig. 114)

Molophilus tetracanthus Alexander, Proc. Linn. Soc. N. S. W. 59: 183 (1934).

Molophilus tetrodonta Alexander, Rec. Indian Mus. 44: 30 (1942).

Primary type. Holotype of: Victoria, Mt Donna Buang, above Warburton, 3000—4000 ft, Apr. 1931, F. E. Wilson (MV); seen.

Published records. Victoria: Mt Dandenong; Mt Donna Buang, above Warburton, 3000—4000 ft (both ALEXANDER 1934: 184).

Previous illustrations. ALEXANDER 1934: Fig. 6. Genitalia. Male hypopygium, Fig. 114.

Remarks. Very similar to M. paratetrodonta sp. n.

New records. New South Wales: Kiandra, 2100 ft (ANIC); Mt Wilson (AM, GT). Victoria: Bulga National Park (MV); Dandenongs, Kallista (MV); Ferntree Gully (MV).

Distribution. New South Wales (SEN), Victoria.

Molophilus (Molophilus) aciferus Alexander (Fig. 115)

Molophilus aciferus Alexander, Ann. Mag. nat. Hist. (9) 20: 33 (1927).

Molophilus elatus Alexander, Ann. Mag. nat. Hist. (10) 7: 158 (1931).

Primary types. Holotype of of M. aciferus Alex-ANDER: Tasmania, Hartz Mts, 10. 12. 1922, A. Tonnoir (ANIC); seen; genitalia missing. Holotype of of M. elatus Alexander: South Australia, Aldgate, Mt Lofty Ranges, Oct. 1929, F. E. Wilson (MV); seen; genitalia missing. Published records. Tasmania: Cradle Valey; Eaglehawk Neck; Hartz Mts; Mt Field; Zeehan (all Alexander 1927c: 34). South Australia: Aldgate, Mt Lofty Ranges (Alexander 1931a: 159).

Genitalia. Male hypopygium, Fig. 115.

Remarks Notvervsimilarto any other descriptions.

Remarks. Not very similar to any other described species.

New records. New South Wales: Black Mtn, A. C. T. (ANIC); Boyd River (ANIC); Diggers Creek, Mt Kosciusko (ANIC); Megalong Valley (NMNH).

Victoria: Dandenongs, Sherbrooke Forest (MV); Sherbrooke (ANIC). Tasmania: 7 mi. W of Maydena (ANIC); National Park (NMNH). South Australia: Mt Lofty, Bav. Gardens (MV). Distribution. New South Wales (SEN), Victoria, Tasmania, South Australia (SES).

Molophilus (Molophilus) bawbawiensis Alex-Ander (Fig. 116)

Molophilus bawbawiensis Alexander, Ann. Mag. nat. Hist (10) 7: 160 (1931).

Primary type. Holotype of: Victoria, Walhalla, foot of Baw Baw Mts, 18—22. 4. 1930, F. E. Wilson (MV); seen.

Published records. Victoria: Walhalla, foot of Baw Baw Mts (ALEXANDER 1931a: 161).

Genitalia. Male hypopygium, Fig. 116.

Remarks. Not similar to any other described species.

New records. New South Wales: Banda Banda Reserve (GT); Macquarie Pass (GT). Victoria: Toorongo Falls (ANIC).

Distribution. New South Wales (NEN, SEN), Victoria.

Molophilus (Molophilus) forceps Alexander (Fig. 117)

Molophilus forceps Alexander, Ann. Mag. nat. Hist. (9) 20: 37 (1927).

Primary type. Holotype O: New South Wales, Blackheath, Blue Mts, 3500 ft, 26. 1. 1922, E. W. Ferguson (ANIC); seen.

Published records. New South Wales: B. M. (= probably ,,Blue Mts");Blackheath, Blue Mts, 3500 ft (both ALEXANDER 1927c: 38).

Genitalia. Male hypopygium, Fig. 117.

Remarks. Not very similar to any other described species.

New records. Blue Mts (ANIC). Distribution. New South Wales (SEN).

Molophilus (Molophilus) mancus Alexander (Fig. 118)

Molophilus mancus Alexander, Proc. Linn. Soc. N. S. W. 69: 12 (1944).

Primary type. Holotype O: Victoria, Swift's Creek, Jan. 1935, F. E. Wilson (MV); seen; genitalia missing.

Published records. Victoria: Swift's Creek (ALEXANDER 1944: 12).

Previous illustrations. ALEXANDER 1944: Fig. 1. Genitalia. Male hypopygium (Fig. 118) with the two gonostyli terminal. Gonocoxite without evident lobes. Outer gonostylus a slender curved blackened rod from an enlarged base. Inner gonostylus a little shorter, expanded at near midlength, the tip acute; surface at near midlength and beyond with several setigerous punctures. Aedeagus unusually wide on basal two—thirds, the distal portion narrowed.

Remarks. Not similar to any other described species.

New records. None.

Distribution. Victoria.

Molophilus (Molophilus) micracantha Alexander

Molophilus micracantha Alexander, Ann. Mag. nat. Hist. (9) 20: 42 (1927).

Primary type. Holotype O: Tasmania, Hartz

Mts, 9. 12. 1922, A. Tonnoir (ANIC); seen; genitalia missing.

Published records. Tasmania: Hartz Mts (ALEX-ANDER 1927c: 43).

Genitalia. Male hypopygium with the dorsal lobe of the gonocoxite very small, obtuse, and not chitinized; ventral lobe clavate, pale, the mesal face with erect to retrorse setae and abundant setulae; mesal lobe conspicuously developed, the mesal face densely setiferous, the apex triangularly produced, terminating in a small, acute, black spine. Outer gonostylus a simple rod, the basal half paler and slightly more dilated, the distal half narrowed into a slender black spine that is angularly bent near midlength, thence running out into a straight acute point. Inner gonostylus shorter, appearing as a flattened blade that bears a flattened spine on the outer margin near mid-length, and a pale tooth—like spine on the inner face just before the gently curved apex; outer margin of style between the lateral spine and apex with three or four appressed spinulae. Aedeagus relatively long and slender, taptering gradually to the very slender apex. Sternite 9 relatively broad, the lateral angles rectangularly rounded. Remarks. Belongs to the M. gracilis group and subgroup (ALEXANDER 1927d). A clear interpretation and an illustration are not possible at the present.

New records. None.

Distribution. Tasmania.

Molophilus (Molophilus) grampianus Alex-Ander (Fig. 119)

Molophilus grampianus Alexander, Ann. Mag. nat. Hist. (10) 5: 382 (1930).

Primary type. Holotype O: Victoria, Grampians, Oct. 1928, F. E. Wilson (MV); seen; genitalia missing; part of genitalia in NMNH; seen. Published records. Victoria: Grampians (ALEX-

ander 1930: 383).

Genitalia. Male hypopygium (Fig. 119) with the lobes of the gonocoxite poorly developed, low and obtuse, not spinous; ventral lobe small, the stem narrower than the oblique head, the latter with the cephalic angle not produced into a spine, as in *M. tristylus* ALEXANDER, at most with a small setiferous tubercle. Outer gonostylus even more profoundly divided than in *M. tristylus*, appearing as two distinct styles; outer arm shorter and less sinuous than in *M. tristylus*, the inner arm with the stem shorter, the apical branches widely separated, tonglike. Inner gonostylus more slender than in *M. tristylus*, the apex suddenly narrowed, blackened, and microscopically serrulate; outer margin at near mid-length with a series of microscopic spinulae. Aedeagus relatively long and slender, subtended by lateral wings or flanges.

Remarks. Very similiar to *M. tristylus* ALEX. New records. New South Wales: Blundells, A. C. T. (NMNH); Ebor (NMNH).

Distribution. New South Wales (NEN, SEN), Victoria.

Molophilus (Molophilus) tristylus Alexander (Fig. 120)

Molophilus tristylus Alexander, Ann. Mag. nat. Hist. (9) 20: 50 (1927).

Primary type. Holotype O: New South Wales, Bulli, 25. 8. 1923, E. W. Ferguson (ANIC); seen.

Published records. New South Wales: Bulli (ALEXANDER 1927c: 51).

Genitalia. Male hypogyium, Fig. 120.

Remarks. Very similiar to M. grampianus ALEX. New records. New South Wales: near Barren Ground (GT); Boyd River (GT); Bulli (ANIC, GT); Fitzroy Falls (ANIC); Kanangra Walls (GT); New England National Park, 4500 ft (ANIC); 4 mi. E of Nimmitabel (ANIC); Styx River, 12 km S of Ebor (MV); Sydney (ANIC); Mt Tomah (NMNH); Wentworth Falls (NMNH); Mt Wilson (NMNH). Victoria: Bogong High Plains (ANIC); Buckland's, Gippsland (ANIC); Mt Baw Baw, 4400 ft (ANIC); Mt Buffalo (ANIC). Tasmania: Clarence River, 9 km E Derwent Bridge (MV). Distribution. New South Wales (NEN, SEN), Victoria, Tasmania.

Molophilus (Molophilus) auriculifer Theischinger (Fig. 121)

Molophilus (Molophilus) auriculifer Theischinger, Stapfia 17: 189 (1988).

Primary type. Holotype O: Queensland, Moses Creek, 4 km N by E of Mt Finnigan, 10. 10. 1980, malaise trap, D. H. Colless (ANIC); seen. Published records. Queensland: Gap Creek, 5 km ESE Mt Finnigan; Moses Creek, 4 km N by E of Mt Finnigan (both Theischinger 1988a: 190).

Previous illustrations. Theischinger 1988a: Fig.31.

Genitalia. Male hypoygium, Fig. 121.

Remarks. Very similiar to M. maigamaigawa sp. n. and M. unispinosus ALEX.

New records. Queensland; jn of Goldmine and Davies Creeks, Kuranda-Mareeba Rd (ANIC). Distribution. Queensland (CY, NEQ).

Molophilus (Molophilus) unispinosus Alex-Ander (Fig. 122)

Molophilus unispinosus Alexander, Can. Ent. 53: 209 (1921).

Molophilus (Molophilus) unispinosus Alexander; Theischinger, Stapfia 17: 193 (1988).

Primary type. Holotype O: Queensland, Babinda, 7. 8. 1920, J. F. Illingworth (NMNH); seen.

Published records. Queensland: Babinda (ALEXANDER 1921: 209).

Genitalia. Male hypopygium, Fig. 122.

Remarks. Very similiar to *M. auriculifer* THEI. and *M. maigamaigawa* sp. n.

New records. None.

Distribution. Queensland (NEO).

Molophilus (Molophilus) maigamaigawa spec. nov. (Fig. 123)

Decription(σ). Colouration: largely brown; head and antennae greyish brown; wings and halteres pale yellowish to greyish brown; midleg yellowish to greyish brown, other legs missing. Dimensions. Wing length 3,9 mm.

Genitalia. Hypopygium, Fig. 123.

Remarks. Very similiar to *M. auriculifer* THEI. and *M. unispinosus* ALEX. Diagnostic for *M. maigamaigawa* is the strongly arched, slender inner gonostylus.

Material examined. Holotype of: Queensland, Mary Falls National Park, 3. 3. 1962, I. B. and I. M. M. (ANIC).

Distribution. Queensland (SEQ).

Name. Maigamaigawa (Australian Aboriginal word for "thumb") refers to the thumb-shaped subapical appendix of the inner gonostylus).

Molophilus (Molophilus) bubbera spec. nov. (Fig. 124)

Description(O). Colouration: largely greyish brown; head and antennae dark brownish grey; wings brown, halteres greyish yellow to brownish grey; legs greyish brown.

Dimensions. Wing length 4,6 — 5,5 mm.

Genitalia. Hypopygium, Fig. 124.

Remarks. Similar to the species around *M. auriculifer* Thei. (see there). Diagnostic for *M. bubbera* are the complex outer and the strongly arched, pointed, inner gonostylus.

Material examined. Holotype O: New South Wales, Alpine Creek, Snowy Mts Highway, 9. 12. 1964, D. H. Colless (ANIC). Paratypes: New South Wales: 2 O, same data as holotype (ANIC, GT); 1 O, Kiandra, Alpine Creek, 9. 12. 1964, N. Dobrotworskyy (ANIC).

Distribution. New South Wales (SEN).

Name. Bubbera (Australian Aboriginal word for "boomerang that returns") refers to the angulated inner gonostylus.

Molophilus (Molophilus) tripectinatus Alex-ANDER (Fig. 125)

Molophilus tripectinatus Alexander, Ann. Mag. nat. Hist. (9) 20: 49 (1927).

Primary type. Holotype O. New South Wales, Sydney, 16. 9. 1923, E. W. Ferguson (ANIC); seen; genitalia missing.

Published records. New South Wales: Sydney (ALEXANDER 1927c: 50).

Genitalia. Male hypopygium, Fig. 125.

Remarks. Similar to M. bubbera sp. n. and M. multicurvatus THEI.

New records. New South Wales: Black Mtn, A. C. T. (ANIC).

Distribution. New South Wales (SEN).

Molophilus (Molophilus) sigma ALEXANDER (Fig. 126)

Molophilus sigma ALEXANDER, Ann. Mag. nat. Hist. (9) 19: 191 (1927).

Primary type. Holotype of: Victoria, Sassafras, Dandenong Range, 1000 ft, 21. 10. 1922, A. Tonnoir (ANIC); seen.

Published records. Victoria: Sassafras, Dandenong Range, 1000 ft (ALEXANDER 1927b: 192).

Genitalia. Male hypopygium, Fig. 126.

Remarks. Similar to the species around M. capitatus ALEX. (see there) and around M. auriculifer Thei. (see there); possibly most similar to M. bubbera sp. n. and M. tripectinatus ALEX.

New records. Victoria: Ben Cairn, near Millgrove, 2900—3200 ft (NMNH); Cement Creek (GT); Ferntree Guly (NMNH); 5 mi. N Foster (ANIC); Healesville (NMNH); Millgrove (NMNH); Mt Dandenong (NMNH); Olinda (NMNH); Sherbrooke (ANIC); Walhalla (NMNH); Warburton (NMNH).

Distribution. Victoria.

Molophilus (Molophilus) multicurvatus Theischinger (Fig. 127)

Molophilus (Molophilus) multicurvatus Theischinger, Stapfia 17: 192 (1988).

Primary type. Holotype O: Queensland, 12°44'S/143°14'E, 3 km ENE of Mt Tozer, 28. 6. — 4. 7. 1986, malaise trap, D. H. Colless (ANIC); seen.

Published records. Queensland: 3 km ENE of Mt Tozer (Theischinger 1988a: 192).

Previous illustrations. Theischinger 1988a: Fig.34.

Genitalia. Male hypopygium, Fig. 127.

Remarks. Not similar to any other described species. Possibly closest to *M. bubbera* sp. n. and *M. tripectinatus* ALEX.

New records. None.

Distribution. Queensland (CY).

Molophilus (Molophilus) capitatus Alexander (Figs 128, ?129, ?130)

Molophilus capitatus Alexander, Ann. Mag. nat. Hist (9) 19: 189 (1927).

Primary type. Holotype of: South Australia, Adelaide, 20. 10. 1921, A. Tonnoir (ANIC); seen.

Published records. New South Wales: Woy Woy (ALEXANDER 1927b: 190). South Australia: Adelaide (ALEXANDER 1927b: 190).

Previous illustrations. ALEXANDER 1978: Fig. 52. Genitalia. Male hypopygium (Figs 128, ?129, ?130) with the ventral lobe of the gonocoxite armed with longer stouter setae. Outer gonostylus similar to that in *M. poliocephalus* ALEX., the outer tooth simple, the lower or more basal tooth flattened into a serrulate plate; a curious, flattened ribbon-like structure appears to arise from this style, directed caudad, the tip a small spine, before the apex on either side with small serrations. Inner gonostylus with the axillary spine smaller. The long ribbon-like appendage on the outer gonostylus does not occur in *M. poliocephalus*, being replaced by a microscopic spur.

Remarks. According to ALEXANDER (1927 b) closely allied to M. poliocephalus ALEX. Similar also to M. gununo sp. n., M. mattina sp. n., M. perserenus ALEX. and M. yabbie sp. n. Much variability, particularly in length, thickness and shape of the mesal appendix of the outer gonostylus was encountered (see illustrations). New records. New South Wales: 24 km S Ebor (MV); 15 mi. S Ebor (ANIC); Narrabarba (ANIC); 92 km SW of Singleton, Putty Rd (ANIC). Victoria. Cann River (ANIC); Lower Tarwin (ANIC); Wallagaraugh (ANIC); 5 West Orbost (ANIC).

Distribution. New South Wales (NEN, SEN), Victoria, South Australia (SES).

Molophilus (Molophilus) poliocephalus ALEX-ANDER (Fig. 131)

Molophilus poliocephalus Alexander, Ann. Mag. nat. Hist. (9) 19: 188 (1927).

Primary type. Holotype O: New South Wales, Dorrigo, 1922, W. Heron (NMNH); seen. Published records. New South Wales: Dorrigo (ALEXANDER 1927b: 189).

Genitalia. Male hypopygium, Fig. 131.

Remarks. Similar to the species around M. capitatus ALEX. (see there).

New records. New South Wales: Brooklana, eastern Dorrigo (NMNH); Ulong, eastern Dorrigo (NMNH).

Distribution. New South Wales (NEN).

Molophilus (Molophilus) tortilis Alexander

Molophilus tortilis Alexander, Ann. Mag. nat. Hist. (9) 19: 190 (1927).

Primary type. Holotype O: New South Wales, Balmoral, near Sydney, 19. 5. 1923, E. W. Ferguson (ANIC); seen; genitalia missing. Published records. New South Wales: Balmoral, near Sydney (ALEXANDER 1927b: 191).

Genitalia. Male hypopygium with the ventral lobe of the gonocoxite well developed, slender, the mesal face with very long, powerful, erect setae, these only a little shorter than the lobe itself; other lobes of gonocoxite poorly developed. Outer gonostylus a short, powerful, clavate lobe, entirely darkened, the base narrow, widened to a collar before the apex, the conical tip suddenly produced, sparsely setiferous; the collar-like ring is produced on the outer margin into a black, gently curved, spiny lobe. Inner gonostylus elongate, very deeply forked, the longest arm about as long as the stem, strongly twisted at base, thence extended into a long straight spine; inner arm shorter than the stem, the apex blackended, the extreme tip suddenly curved, acute. Aedeagus relatively long and slender.

Remarks. A clear interpretation and an illustration of *M. tortilis* are not possible at the present. According to ALEXANDER (1927b) it is closely allied to *M. poliocephalus* ALEX.

New records. None.

Distribution. New South Wales (SEN).

Molophilus (Molophilus) gununo spec. nov. (Fig. 132).

Description (O): Colouration: largely dark yellowish brown; head brownish grey, antennae greyish yellow; wings dull yellow, halteres whitish grey; legs greyish yellow to pale greyish brown.

Dimensions. Wing length 3,8 mm.

Genitalia. Hypopygium, Fig. 132.

Remarks. A typical member of the group of species around *M. capitatus* ALEX.; most similar to *M. mattina* sp. n. Diagnostic for *M. gununo* is the snake-like shape of the inner gonostylus. Material examined. Holotype σ : New South Wales, Royal National Park, Heathcote Brook, June 1980, G. Theischinger (ANIC).

Distribution. New South Wales (SEN).

Name. Gununo (Australian Aboriginal word for "black snake") refers to the shape of the inner gonostylus.

Molophilus (Molophilus) mattina spec. nov. (Fig. 133)

Description. Colouration: largely dark yellowish to greyish brown; head brownish grey, antennae dark greyish yellow; wings pale yellowish brown, halteres whitish to greyish yellow; legs yellowish to greyish brown, distal half of femora slightly darkened, apex of tibiae markedly darkened.

Dimensions. Wing length, male 4,5—4,8 mm, female 5,2 mm.

Genitalia. Male hypopygium, Fig. 133.

Remarks. A typical member of the group of species around *M. capitatus* ALEX.; most similar to *M. gununo* sp. n. Diagnostic for *M. mattina* is the forked claw-shaped inner gonostylus.

Material examined. Holotype O: New South Wales, Jenolan State Forest, 12. 2. 1988, G. Theischinger (ANIC). Paratypes: New South Wales 1 O, 1 Q, same data as holotype (ANIC, GT).

Distribution. New South Wales (SEN).

Name. Mattina (Australian Aboriginal word for "double-pointed club") refers to shape of the inner gonostylus.

Molophilus (Molophilus) yabbie spec. nov. (Fig. 134)

Description (O). Colouration: largely yellowish to reddish brown; head grey, antennae yellowish brown; wings and halteres pale reddish to greyish brown; legs yellowish to pale reddish brown.

Dimensions. Wing length 4,6 mm.

Genitalia. Hypopygium, Fig. 134.

Remarks. A typical member of the group of species around *M. capitatus* ALEX. (see there). Most similar to *M. mattina* sp. n. Diagnostic for *M. yabbie* is the S-curved claw-shaped inner gonostylus.

Material examined. Holotype O: Victoria, 9ne Violet Town, 8. 12. 1964, N. Dobrotworsky (ANIC).

Distribution. Victoria.

Name. Yabbie (Australian Aboriginal word for "small crayfish") refers to the claw-shaped inner gonostylus.

Molophilus (Molophilus) perserenus Alexander (Fig. 135)

Molophilus (Molophilus) perserenus Alexander, Studia ent. 20: 172 (1978).

Molophilus (Molophilus) perserenus Alexander; Theischinger, Stapfia 17: 192 (1988).

Primary type. Holotype O: Queensland, Samford Valley, 14 mi. WNW of Brisbane, July-Sep. 1972, B. Persson (NMNH); seen. Published records. Queensland: Samford Valley, 14 mi. WNW of Brisbane (ALEXANDER 1978: 172).

Previous illustrations. Alexander 1978: Fig. 56; Theischinger 1988a: Fig. 35.

Genitalia. Male hypopygium, Fig. 135.

Remarks. Similar to the species around M. capitatus ALEX. (see there).

New records. Queensland: 18 km S of Innisfail (MV).

Distribution. Queensland (NEQ, SEQ).

Molophilus (Molophilus) alpicola ALEXAN-DER

Molophilus alpicola Alexander, Ann. Mag. nat. Hist. (10) 5: 377 (1930).

Primary type. Holotype O: Victoria, Bogong High Plains, 5600—6000 ft, Jan. 1928, F. E. Wilson (MV); seen; genitalia missing.

Published records. Victoria: Bogong High Plains, 5600—6000 ft (ALEXANDER 1930: 378). Genitalia. Male hypopygium very short and broad. Tergite 9 with the caudal margin convexly rounded and here with a median group of setae.Gonocoxite short and stout, the ventral lobe broad, densely provided with coarse setae. Outer gonostylus with the stem very slender, bearing a small lobule at base; distal half of stem expanded into a blade that splits into two arms; outer arm slender, gently sinuous, inner arm with the basal half expanded into a conspicous flange, the distal half slender. Inner gonostylus a simple powerful blackened structure, the base stout, the apical third bent at more than a right angle into a long stout spine. No distinct parameres are apparent. Aedeagus long and slender, the basal third with conspicuous lateral flanges, the distal portion slender, in slide-mounts extending to beyond the level of the apex of the basal gonostylus. Remarks. According to ALEXANDER (1931b) closely allied to M. subalpicola ALEX. A clear interpretation and an illustration are not possible at the present.

New records. None.

Distribution, Victoria.

Molophilus (Molophilus) suavis Alexander (Fig. 136)

Molophilus suavis Alexander, Ann. Mag. nat. Hist. (9) 20: 43 (1927).

Primary type. Holotype of: Tasmania, Cradle Valley, 3500 ft, 11.1.1923, A. Tonnoir (ANIC); seen.

Published records. Tasmania: Adventure Bay; Cradle Valley, 3500 ft (both ALEXANDER 1927c: 44).

Genitalia. Male hypopygium, Fig. 136.

Remarks. Not similar to any other described

species.

New records. Tasmania: 7 mi. W of Maydena (ANIC); Mt Wellington (NMNH).

Distribution. Tasmania.

Molophilus (Molophilus) chloris Alexander (Fig. 137)

Molophilus chloris Alexander, Ann. Mag. nat. Hist. (10) 5: 379 (1930).

Molophilus chloris chloris Alexander, Ann. Mag. nat. Hist. (10) 7: 167 (1931).

Molophilus chloris inquirendus Alexander, Ann. Mag. nat. Hist. (10) 7: 167 (1931).

Primary types. Holotype O of *M. chloris* ALEX-ANDER: Victoria, Belgrave, in dark fern gully, 13. 1. 1929, F. E. Wilson (MV); seen; genitalia missing. Holotype O of *M. chloris inquirendus* ALEXANDER: Victoria, Healesville, 21. 4. 1929, F. E. Wilson (MV); seen.

Published records. Victoria: Belgrave (ALEXANDER 1930: 379); Healesville (ALEXANDER 1931a: 167).

Genitalia. Male hypopygium, Fig. 137.

Remarks. Similar to *M. subalpicola* ALEX. and *M. trispinosus* sp. n. *M. chloris inquirendus* ALEX. is not considered a distinct subspecies. New records. New South Wales: Brindabella Range, A C.T. (ANIC). Victoria: Beech Forest, Otway Peninsula (NMNH); Dandenongs, Kallista (MV); Healesville (NMNH); mts above Millgrove (NMNH); Sassafras (MV); Toorongo Falls (ANIC); Walhalla (NMNH).

Distribution. New South Wales (SEN), Victoria.

Molophilus (Molophilus) subalpicola Alex-ANDER (Figs 138, 139)

Molophilus subalpicola Alexander, Ann. Mag. nat. Hist. (10) 7: 165 (1931).

Primary type. Holotype of: Victoria, Mt Donna Buang, above Warburton, 3000—3800 ft, 2. 3. 1930, F. E. Wilson (MV); seen.

Published records. Victoria: Mt Donna Buang, above Warburton, 3000—3800 ft; Ben Cairn, above Millgrove (both ALEXANDER 1931a: 165). Genitalia. Male hypopygium, Figs 138, 139. Remarks. Similar to *M. chloris* ALEX. and *M*.

trispinosus sp. n. According to ALEXANDER (1931b) closely allied to *M. alpicola* ALEX. Number and size of the spines on the inner gonostylus seem remarkably variable (see illustrations).

New records. New South Wales: Brown Mtn near Bega (ANIC). Victoria: Acheron Way (ANIC); Mt Baw Baw (ANIC); Bellel Ck, near Marysville (GT); Cumberland Ck (ANIC); Cumberland Falls, near Marysville (MV).

Distribution. New South Wales (SEN), Victoria.

Molophilus (Molophilus) trispinosus spec. nov. (Fig. 140)

Discription (O). Colouration: largely dark greyish brown; head grey, antennae greyish brown; wings yellowish to pale greyish brown with darker patch, halteres brownish yellow; legs yellowish to greyish brown, with apex of femora and tibiae darkened.

Dimensions. Wing length 6,4—6,7 mm. Genitalia. Hypopygium, Fig. 140.

Remarks. Very similar to *M. subalpicola* ALEX. Diagnostic for *M. trispinosus* is the inner gonostylus which bears three well defined spines.

Material examined. Holotype O: Victoria, Bogong High Plains, 22. 1. 1965, N. Dobrotworsky (ANIC). Paratypes: Victoria: 2 O, Bogong, Howmans, 23. 1. 1965, N. Dobrotworsky (ANIC, GT).

Distribution. Victoria.

Name. Trispinosus (Latin for "with three spines") refers to the inner gonostylus.

Molophilus (Molophilus) annexus Alexander (Fig. 141)

Molophilus annexus Alexander, Ann. Mag. nat. Hist. (9) 19: 28 (1927).

Primary type. Holotype of: Tasmania, Adventure Bay, 30. 12. 1922, A. Tonnoir (ANIC); seen.

Published records. Tasmania: Adventure Bay; Fern Tree, Mt Wellington; Hartz Mts; National Park; Mt Wellington (all ALEXANDER 1927a: 29).

Genitalia. Male hypopygium, Fig. 141.

Remarks. Very similar to M. ruficollis Skuse. New records. Tasmania: Florentine River, 15 mi. W Maydena (MV); Hobart, Strickland Ave (MV); Hot Springs Creek, Hastings Caves (MV); National Park (NMNH); Russel Falls, National Park (MV); Snake Creek, Fisher River Rd (MV); Mt Wellington (NMNH).

Distribution. Tasmania.

Molophilus (Molophilus) ruficollis Skuse (Fig. 142)

Molophilus ruficolllis Skuse, Proc. Linn. Soc. N. S. W. 4: 804 (1890).

Molophilus ruficollis Skuse; Alexander, Proc. Linn. Soc. N. S. W. 54: 141 (1929).

Primary type. Lectotype O: New South Wales, Lawson, Jan., Masters (ANIC); seen.

Published records. New South Wales: Lawson, Blue Mts (Skuse 1890: 805).

Previous illustrations. ALEXANDER 1929b: Fig. 6. Genitalia. Male hypopygium, Fig. 142.

Remarks. Very similar to *M. annexus* Alex. New records. New South Wales: Fitzroy Falls,

2500 ft (ANIC); Watagan Forest (GT).

Distribution. New South Wales (SEN).

Molophilus (Molophilus) amiculus Alexander (Fig. 143)

Molophilus amiculus Alexander, Ann. Mag. nat. Hist. (9) 19: 177 (1927).

Primary type. Holotype O: Tasmania, King River, 500 ft, 4. 2. 1923, A. Tonnoir (ANIC); seen; genitalia missing.

Published records. Tasmania: King River, 500 ft (ALEXANDER 1927b: 178).

Genitalia. Male hypopygium, Fig. 143.

Remarks. Not very similar to any other decribed species.

New records. Tasmania: Mt Bobs Range, near Pine Lake, 700 m (GT). Distribution. Tasmania.

Distribution. New South Wales (NEN), Victoria.

Molophilus (Molophilus) dorriganus Alex-Ander (Fig. 144)

Molophilus dorriganus Alexander, Proc. Linn. Soc. N. S. W. 59: 184 (1934).

Primary type. Holotype O: New South Wales, Dorrigo, eastern Dorrigo, 2300 ft, 20. 3. 1931, W. Heron (NMNH); seen.

Published records. New South Wales: Dorrigo, eastern Dorrigo, 2300 ft (ALEXANDER 1934: 1984).

Previous illustrations. ALEXANDER 1934: Fig. 7. Genitalia. Male hypopygium, Fig. 144.

Remarks. Similar to *M. macleayanus* ALEX. and *M. variistylus* ALEX.

New records. New South Wales: upper Allyn River (ANIC); Nanack Fire Rd, 29 mi. Dorrigo-Coramba Rd (ANIC).

Distribution. New South Wales (NEN).

Molophilus (Molophilus) macleayanus Alex-Ander (Fig. 145)

Molophilus macleayanus Alexander, Proc. Linn. Soc. N. S. W. 53: 68 (1928)

Primary type. Holotype O: New South Wales, Barrington Tops, in Fagus brush, Jan. 1925, S. U. Zool. Exp. (ANIC); seen.

Published records. New South Wales: Barrington Tops (ALEXANDER 1928: 69).

Genitalia. Male hypopygium, Fig. 145.

Remarks. Similar to M. dorriganus ALEX. and M. variistylus ALEX.

New records. Victoria: Beech Forest, Otway Peninsula (NMNH); Belgrave (NMNH); Bell Bird Creek (ANIC); Bulga National Park, West Gippsland (MV); Cabbage Tree Creek, East Gippsland (MV); Cameron Creek, near Marysville (GT); Cape Otway (ANIC); Cascades, near Marysville (GT); Cement Creek (GT); Mt Donna Buang (NMNH); Taggerty River (GT); Turtons Pass (ANIC).

Molophilus (Molophilus) variistylus Alexander (Fig. 146)

Molophilus (Molophilus) variistylus ALEXANDER, Ann. Mag. nat. Hist. (9) 19: 25 (1927).

Primary type. Holotype O: Tasmania, Mt Wellington, 2. 12. 1922, A. Tonnoir (ANIC); seen.

Published records. Tasmania: Adventure Bay; Eaglehawk Neck; Hartz Mts; King River; Lake Margaret; Mt Farrell; National Park; Strahan; Mt Wellington; Zeehan (all ALEXANDER 1927a: 26).

Genitalia. Male hypopoygium, Fig. 146. Remarks. Similar to *M. dorriganus* ALEX. and *M. macleayanus* ALEX. The paratype specimen recorded by ALEXANDER (1927a) from Cradle Valley belongs to *M. perdistinctus* ALEX. New records. Tasmania: Lake St Clair, 700 m (ANIC); Mt Barrow, 2500 ft (ANIC); National Park (NMNH); 10 mi. E of Strahan (ANIC); Waratah (ANIC); Mt Wellington (NMNH). Distribution. Tasmania.

Molophilus (Molophilus) iluka spec. nov. (Fig. 147)

Description (O). Colouration: largely greyish yellow; head and antennae yellowish grey; wings and halteres pale brownish yellow; legs whitish to pale brownish yellow.

Dimensions. Wing length 3,4 mm.

Genitalia. Hypopygium, Fig. 147.

Remarks. Not similar to any other described species. Diagnostic for *M. iluka* are a small hairy lobe on the mesal face of the gonocoxite and the forked inner gonostylus.

Material examined, Holotype O: New South Wales, Esk River, near Iluka, rainforest, 24. 11. 1985, D. Bickel and G. Cassis (ANIC).

Distribution. New South Wales (NEN).

Name. Iluka refers to the type locality; it is to be redarded as an undeclinable noun in apposition to the generic name.

Molophilus (Molophilus) dorsolobatus Theischinger (Fig. 148)

Molophilus (Molophilus) dorsolobatus Theischinger, Stapfia 17: 190 (1988).

Primary type. Holotype O: Western Australia, 8 mi. N of Bunbury, 1. 10. 1970, D. H. Colless (ANIC); seen.

Published records. Western Australia: 8 mi. N of Bunbury (Theischinger 1988a: 191).

Previous illustrations. Theischinger 1988a: Fig.32.

Genitalia. Male hypopygium, Fig. 148.

Remarks. Not similar to any other described species. Possibly closest to the group around *M. dorriganus* ALEX.

New records. None.

Distribution. Western Australia (SWA).

Molophilus (Molophilus) apricus Alexander (Fig. 149)

Molophilus apricus Alexander, Ann. Mag. nat. Hist. (9) 19: 181 (1927).

Primary type. Holotype of: Tasmania, Strahan, 5. 2. 1923, A. Tonnoir (ANIC); seen.

Published records. Tasmania: Adventure Bay; Geeveston; Strahan (all ALEXANDER 1927b: 182). Genitalia. Male hypopygium, Fig. 149.

Remarks. Very similar to *M. congregatus* ALEX. New records. Tasmania: W-Arthur Plains (MV); Gordon River, 1 km above First Split (MV); Huon-Picton River jn (MV); Huon River, near Scotts Peak (MV); Lonisa (MV).

Distribution. Tasmania.

Molophilus (Molophilus) congregatus Alex-Ander (Fig. 150)

Molophilus congregatus Alexander, Ann. Mag. nat. Hist. (10) 7: 166 (1931).

Primary type. Holotype O: Victoria, Thompson River, near Walhalla, 18. — 22. 4. 1930, F. E. Wilson (MV); seen.

Published records. Victoria: Thompson River, near Walhalla (ALEXANDER 1931a: 166). Genitalia. Male hypopygium, Fig. 150.

Remarks. Very similar to *M. apricus* ALEX. New records. Victoria: Buffalo River, Dandongadale (GT, MV). Distribution. Victoria.

Molophilus (Molophilus) immutatus Alex-Ander (Fig. 151)

Molophilus immutatus Alexander, Ann. Mag. nat. Hist. 10 (3): 335 (1929).

Primary type. Holotype O: Victoria, Millgrove, 7. 4. 1928, F. E. Wilson (MV); seen; genitalia missing.

Published records. Victoria: Millgrove (ALEX-ANDER 1929a: 336).

Genitalia. Male hypopygium, Fig. 151.

Remarks. Similar to M. permutatus ALEX., M. pictor ALEX. and M. praelatus ALEX.

New records. Victoria: Beenak (NMNH); Bellel Creek, near Marysville (GT).

Distribution. Victoria.

Molophilus (Molophilus) praelatus ALEXAN-DER (Fig. 152)

Molophilus praelatus Alexander, Ann. Mag. nat. Hist. (9) 20: 53 (1927).

Primary type. Holotype O: New South Wales, Blackheath, Blue Mts, 3500 ft, 26. 1. 1922, E.W. Ferguson (ANIC); seen; genitalia in poor condition.

Published records. New South Wales: Blackheath, Blue Mts, 3500 ft (ALEXANDER 1927c: 54).

Genitalia. Male hypopygium (Fig. 152) short and compact. Gonocoxite with the ventral lobe relatively short and stout, the apex obtusely rounded, the mesal face with long, dense, yellow setae; dorsal and mesal lobes of gonocoxite short and obtuse, but indicated. Outer gonostylus a powerful black sickle-shaped rod, the base enlarged, the stem strongly curved to the long black apical spine, the lateral margin with about fifteen small appressed spinulae. Inner gonostylus of approximately the same length as the outer, but more slender basally and bent in the opposite direction, the apex a strongly curved hook-like spine, separated by a small circular

notch from a flange-like expansion on the inner face of the style. Aedeagus relatively short, about as long as the gonostyli, slender, the basal two-thirds subtended by a pale wing on either side. What would appear from its position to represent gonapophyses (= parameres) is a heavily blackend median structure, the base broadest, narrowed to the apex which terminates in two powerful divaricate hooks, directed laterad, the apical notch thus formed V-shaped, provided with a few small setae.

Remarks. Similar to M. immutatus ALEX., M. permutatus ALEX. and M. pictor ALEX.

New records. None.

Distribution. New South Wales (SEN).

Molophilus (Molophilus) permutatus Alexander (Fig. 153)

Molophilus permutatus Alexander, Ann. Mag. nat. Hist. (10) 7: 162 (1931).

Primary type. Holotype of: Victoria, Mt Donna Buang, above Warburton, 3000—3800 ft, 2. 3. 1930, F. E. Wilson (MV); seen.

Published records. Victoria: Mt Donna Buang, above Warburton, 3000—3800 ft (ALEXANDER 1931a: 163).

Genitalia. Male hypopygium, Fig. 153.

Remarks. Similar to M. immutatus ALEX., M. pictor ALEX. and M. praelatus ALEX.

New records. Victoria: Toorongo Falls (ANIC); Warburton (NMNH).

Distribution. Victoria.

Molophilus (Molophilus) pictor Alexander (Fig. 154)

Molophilus pictor Alexander, Proc. Linn. Soc. N. S. W. 59: 184 (1934).

Primary type. Holotype O: Victoria, Warburton, on and near rock faces at river level, 500 ft, Apr. 1931, F. E. Wilson (MV); seen.

Published records. Victoria: Warburton, 500 ft (ALEXANDER 1934: 185).

Previous illustrations. ALEXANDER 1934: Fig. 8. Genitalia. Male hypopygium, Fig. 154.

Remarks. Similar to *M. immutatus* ALEX., *M. permutatus* ALEX. and *M. praelatus* ALEX. The outer gonostylus of *M. pictor* was apparently illustrated in inverted position by ALEXANDER (1934).

New records. Victoria: Bogong Village (MV); Wilsons's Promontory, Lilly Pilly Gully (MV). Distribution. Victoria.

Molophilus (Molophilus) cerberus Alexander (Fig. 155)

Molophilus cerberus Alexander, Ann. Mag. nat. Hist. (9) 19: 182 (1927).

Primary type. Holotype of: Tasmania, Cradle Valley, 11. 1. 1923, A. Tonnoir (ANIC); seen. Published records. Tasmania: Cradle Valley (ALEXANDER 1927b: 183).

Genitalia. Male hypopygium, Fig. 155.

Remarks. Not very similar to any other described species. Possibly closest to the group around *M. apricus* ALEX. (see there) and to the group around *M. immutatus* ALEX. (see there).

New records. None.

Distribution. Tasmania.

Molophilus (Molophilus) mjobergi Alexander (Fig. 156)

Molophilus mjöbergi Alexander, Ann. Mag. nat. Hist. (9) 20: 51 (1927).

Molophilus (Molophilus) mjobergi Alexander; Theischinger, Stapfia 17: 191 (1988).

Primary type. Holotype O: Queensland, Malanda, 2400 ft, E. Mjöberg (RS); seen.

Published records. Queensland: Birthday Creek, 6 km NW by W of Paluma; 1 mi. E of Kuranda (both Theischinger 1988a: 191); Malanda, 2400 ft (ALEXANDER 1927c: 52).

Previous illustrations. Theischinger 1988a: Fig. 33.

Genitalia. Male hypopygium, Fig. 156.

Remarks. Similar M. opulus ALEX. and M. vividus ALEX. from Australia and to M. serpentarius ALEX. from New Guinea.

New records. None.

Distribution. Queensland (NEQ).

Molophilus (Molophilus) opulus Alexander (Fig. 157)

Molophilus opulus Alexander, Ann. Mag. nat. Hist. (10) 3: 333 (1929).

Primary type. Holotype O: New South Wales, Brooklana, eastern Dorrigo, ca. 2000 ft, 7. 5. 1928, W. Heron (NMNH); seen.

Published records. New South Wales: Brooklana, eastern Dorrigo, ca. 2000 ft (ALEXANDER 1929a: 334).

Genitalia. Male hypopygium, Fig. 157.

Remarks. Similar to M. mjobergi ALEX. and M. vividus ALEX.

New records. Queensland: Cunninghams Gap, 2500 ft (ANIC). New South Wales: Brooklana, eastern Dorrigo (NMNH); eastern Dorrigo, 3000 ft (NMNH); Mount Wilson, Blue Mts (AM). Distribution. Queensland (SEQ), New South Wales (NEN, SEN).

Molophilus (Molophilus) vividus Alexander (Fig. 158)

Molophilus vividus Alexander, Ann. Mag. nat. Hist. (10) 7: 163 (1931).

Primary type. Holotype of: Victoria, Mt Donna Buang, above Warburton, 3000—3800 ft, 2. 3. 1930, F. E. Wilson (MV); seen.

Published records. Victoria: Mt Donna Buang, above Warburton, 3000—3800 ft (ALEXANDER 1931a: 164).

Genitalia. Male hypopygium, Fig. 158.

Remarks. Similar to M. mjobergi ALEX. and M. opulus ALEX.

New records. New South Wales: Black Mtn, A. C. T. (ANIC); Clyde Mtn area (ANIC); Macquarie Pass (GT). Victoria: Cabbanah, 1340 ft (ANIC); 15 km E Gembrook (MV); 17 mi SW Lake Mtn, 3000 ft (ANIC); Macedon (NMNH); Mt Baw Baw, 4000 ft (ANIC); 7 km W Neerim, Tarago River (MV); Noojee, Paddock (ANIC); Sherbrooke (ANIC); Simpson's Creek, Gippsland (ANIC); Thurra River, Gippsland (ANIC).

Distribution. New South Wales (SEN), Victoria.

Molophilus (Molophilus) ampliatus ALEXAN-DER (Fig. 159)

Molophilus ampliatus Alexander, Ann. Mag. nat. Hist. (9) 19: 178 (1927).

Primary type. Holotype of: Tasmania, Cradle Valley, 10. 1. 1923, A. Tonnoir (ANIC); seen. Published records. Tasmania: Adventure Bay; Cradle Valley; Mt Field (all ALEXANDER 1927b: 179).

Genitalia. Male hypopygium, Fig. 159.

Remarks. Similar to M. lucidipennis Skuse.

New records. Tasmania: Hartz Mts National Park, 840 m (GT).

Distribution. Tasmania.

Molophilus (Molophilus) lucidipennis Skuse (Fig. 160)

Molophilus lucidipennis Skuse, Proc. Linn. Soc. N. S. W. 4: 813 (1890).

Molophilus lucidipennis Skuse; Alexander, Proc. Linn. Soc. N. S. W. 54: 141 (1929).

Primary type. Lectotype O: New South Wales, Lawson, Blue Mts, Jan., Masters (ANIC); seen. Published records. New South Wales: Lawson, Blue Mts (Skuse 1890: 814).

Previous illustrations. ALEXANDER 1929b: Fig. 7. Genitalia. Male hypopygium, Fig. 160.

Remarks. Similar to M. ampliatus ALEX.

New records. New South Wales: Wentworth Falls (ANIC, NMNH).

Distribution. New South Wales (SEN).

Molophilus (Molophilus) erebus Alexander (Fig. 161)

Molophilus erebus Alexander, Ann. Mag. nat. Hist. (9) 19: 183 (1927).

Primary type. Holotype of: Tasmania, Zeehan, 7. 2. 1923, A. Tonnoir (ANIC); seen.

Published records. Tasmania: Cradle Valley; Zeehan (both ALEXANDER 1927b: 184).

Genitalia. Male hypopygium, Fig. 161.

Remarks. Very similar to *M. parerebus* sp. n. New records. Tasmania: Mt Field National

Park, Lyrebird Walk, 700 m (GT). Distribution. Tasmania.

Molophilus (Molophilus) parerebus spec. nov. (Fig. 162)

Description(O). Colouration: largely brownish grey; wings pale brownish grey with indistinct darker patches, halteres brownish grey; legs greyish brown.

Dimensions. Wing length 4,9 mm.

Genitalia. Hypopygium, Fig. 162.

Remarks. Most similar to M. erebus ALEX. Diagnostic for M. parerebus are the smaller and less strongly curved gonostyli and the less prominent lobes of the gonocoxite.

Material examined. Holotype O: New South Wales, Katoomba, 23. 6. 1959, G. H. Hardy (ANIC).

Distribution. New South Wales (SEN).

Name. Parerebus (para = Greek for "close by") refers to the marked similarity to M. erebus ALEX.

Molophilus (Molophilus) scaber Alexander (Fig. 163)

Molophilus scaber Alexander, Ann. Mag. nat. Hist. (9) 20: 48 (1927).

Primary type. Holotype O: New South Wales, Blackheath, Blue Mts, 3500 ft, 13. 4. 1922, E. W. Ferguson (ANIC); seen.

Published records. New South Wales: Blackheath, Blue Mts, 3500 ft; French's Forest, near Sydney (both ALEXANDER 1927c: 49).

Genitalia. Male hypopygium, Fig. 163.

Remarks. According to ALEXANDER (1927d), Dr Ferguson and Dr Mackerras both noted that *M. scaber* is very close to *M. helmsi* Skuse. It is not possible to interpret *M. helmsi* (see there), but in my opinion *M. scaber* is similar in some respect to *M. erebus* ALEX. and *M. parerebus* sp. n.

New records. New South Wales: French's Forest (ANIC).

Distribution. New South Wales (SEN).

Molophilus (Molophilus) strix ALEXANDER (Fig. 164)

Molophilus strix Alexander, Ann. Mag. nat. Hist (10) 5: 376 (1930).

Primary type. Holotype of: Victoria, Melton, 27. 5. 1928, F. E. Wilson (MV); seen.

Published records. Victoria: Clarkefield; Melton; Quantong (all ALEXANDER 1930: 377). Genitalia. Male hypopygium, Fig. 164.

Remarks. Not very similar to any other described species.

New records. Queensland: Mt Moffatt (GT). New South Wales: 9 mi. E Armidale (ANIC); Bogen River (NMNH); Hardwick, near Yass, Black Bog (NMNH); Murrumbidgee River, A. C. T. (ANIC). Victoria: Echuca (NMNH); Genoa Creek Falls (MV); Maxwell River (MV); Violet Town (ANIC); You Yongs (ANIC). South Australia: Antikoolirrinna (ANIC); Mungeranie Bore (ANIC).

Distribution. Queensland (SIQ), New South Wales (SEN), Victoria, South Australia (IA).

Molophilus (Molophilus) extensicornis ALEX-ANDER (Fig. 165)

Molophilus extensicornis Alexander, Proc. Linn. Soc. N. S. W. 59: 187 (1934).

Primary type. Holotype O: Victoria, Yarram, South Gippsland, 2. 7. 1933, F. E. Wilson (MV); seen; genitalia missing; parts of genitalia in NMNH; seen.

Published records. Victoria: Yarram, South Gippsland (ALEXANDER 1934: 188).

Previous illustrations. Alexander 1934d: Fig.11.

Genitalia. Male hypopygium (Fig. 165) with the ventral lobe of gonocoxite elongate, narrowed to the obtuse tip, the mesal face with long, very delicate setae. Outer gonostylus bifid, the two arms long and divergent, the outer longer, a little expanded at tip; inner arm with an erect blackened tooth before apex. Inner gonostylus shorter than the outer, appearing as a strongly curved rod that terminates in an acute black spine; outer half of style with abundant delicate setae, especially on lateral face and surrounding the apical spine. Parameres black,

narrowed at apex into a group of four black spines that are arranged more or less in pairs, the apical pair lying about in a line with the axis of the structure and not divergent. Tergite 9 large and conspicuous, as in this restricted section, profoundly emarginate, the lobes with coarse black setae.

Remarks. Similar to *M. wilsoni* ALEX., very similar to *M. maroondah* sp. n. and *M. tasioceroides* ALEX.

New records. None.

Distribution. Victoria.

Molophilus (Molophilus) tasioceroides Alex-ANDER (Fig. 166)

Molophilus tasioceroides Alexander, Ann. Mag. nat. Hist. (10) 5: 380 (1930).

Primary type. Holotype of: Victoria, Belgrave, in dark ferngully, 900 ft, 4. 6. 1928, F. E. Wilson (MV); seen.

Published records. Victoria: Belgrave, 900 ft (ALEXANDER 1930: 380).

Genitalia. Male hypopygium, Fig. 166.

Remarks. Similar to *M. wilsoni* ALEX., very similar to *M. extensicornis* ALEX. and to *M. maroondah* sp. n.

New records. Victoria: Sherbrooke (MV). Distribution. Victoria.

Molophilus (Molophilus) maroondah spec. nov. (Fig. 167)

Description (O), Colouration: largely greyish brown; head grey, antennae brown and extremely long; wings and halteres pale greyish brown; legs yellow to greyish brown.

Dimensions. Wing length 5,4 mm.

Genitalia. Hypopygium, Fig. 167.

Remarks. Most similar to *M. extensicornis* ALEX. and *M. tasioceroides* ALEX. Diagnostic for *M. maroondah* is the plump and almost straight inner gonostylus.

Material examined. Holotype O: Victoria, Maroondah, 10. 6. 1964, N. Dobrotworsky (ANIC).

Distribution. Victoria.

Name. Maroondah refers to the type locality; it

is to be regarded as an undeclinable noun in apposition to the generic name.

Molophilus (Molophilus) wilsoni Alexander (Fig. 168)

Molophilus wilsoni Alexander, Ann. Mag. nat. Hist. (10) 3: 334 (1929).

Primary type. Holotype of: Victoria, Millgrove, 7. 4. 1928, F. E. Wilson (MV); seen.

Published records. Victoria: Millgrove; Warburton, 3500—4000 ft (both ALEXANDER 1929a: 335).

Genitalia. Male hypopygium, Fig. 168.

Remarks. Similar to M. extensicornis ALEX., M. maroondah sp. n. and M. tasioceroides ALEX. New records. Victoria: Lake Mtn, Echo Flat (ANIC); Maroondah (ANIC); mts above Warburton (NMNH).

Distribution. Victoria.

Molophilus (Molophilus) expansus Alexander (Fig. 169)

Molophilus expansus Alexander, Ann. Mag. nat. Hist. (9) 19: 27 (1927).

Primary type. Holotype of: Tasmania, Cradle Valley, 10. 1. 1923, A. Tonnoir (ANIC); seen. Published records. Tasmania: Cradle Valley; Hartz Mts; King River (all ALEXANDER 1927:28). Genitalia. Male hypopygium, Fig. 169.

Remarks. Very similar to *M. trigonalis* ALEX. New records. Victoria: Beech Forest, Otway Peninsula (NMNH); Hordern Vale (NMNH). Tasmania: Lake Pedder (MV).

Distribution. Victoria, Tasmania.

Molophilus (Molophilus) trigonalis ALEXAN-DER (Fig. 170)

Molophilus trigonalis Alexander, Ann. Mag. nat. Hist. (10) 7: 164 (1931).

Primary type. Holotype of: Victoria, Mt Donna Buang, above Warburton, 3000—3800 ft, 2. 3. 1930, F. E. Wilson (MV); seen.

Published records. Victoria: Beenak, head of Bunyip River; Mt Donna Buang, above Warburton, 3000—3800 ft (both ALEXANDER 1931a: 165).

Genitalia. Male hypopygium, Fig. 170.

Remarks. Very similar to *M. expansus* ALEX. New records. Victoria: Cameron Creek, near Marysville (GT); Cement Creek, near Warburton (MV); Cumberland Creek (ANIC); MtBaw Baw, 3600—4000 ft (ANIC); Mt Donna Buang, 3800—4000 ft (NMNH); Sherbrooke (ANIC); Wilson's Promontory, Chinaman's Creek (ANIC).

Distribution. Victoria.

Molophilus (Molophilus) riawunna spec. nov. (Fig. 171)

Description (O). Colouration: largely greyish brown; head grey, antennnae brown; wings and halteres pale greyish brown; legs dull yellowish to greyish brown.

Dimensions. Wing length 4,2—4,7 mm. Genitalia. Hypopygium, Fig. 171.

Remarks. Not similar to any other described species. Diagnostic for *M. riawunna* are the very peculiar, almost ring—shaped and conspicuously armed parameres.

Material examined. Holotype O: Western Australia, Porongurup Range, 11. 10. 1965, N. Dobrotworsky (ANIC). Paratypes: Western Australia: 2 O, same data as holotype (ANIC, GT); 1 O, Jarrahdale, 4. 10. 1965, N. Dobrotworsky (ANIC); 1 O, Mandijong, 4. 10. 1965, N. Dobrotworsky (ANIC); 1 O, Pemberton, Teatree Swamp, 9. 10. 1965, N. Dobrotworsky (ANIC).

Distribution. Western Australia (SWA).

Name. Riawunna (Australian Aboriginal word for "circle") refers to the outlines of the parameres.

Molophilus (Molophilus) bunyipensis Alexander (Fig. 172)

Molophilus bunyipensis Alexander, Ann. Mag. nat. Hist (10) 7: 155 (1931).

Primary type. Holotype O: Victoria, Beenak, near head of Bunyip River, in beech gully, 9. 3. 1930, F. E. Wilson (MV); seen.

Published records. Victoria: Beenak, near head of Bunyip River (ALEXANDER 1931: 156).

Genitalia. Male hypopygium, Fig. 172.

Remarks. Not similar to any other described species.

New records. Victoria: Crowe's, Otway Peninsula (NMNH); Hordern Vale, Otway Peninsula (NMNH); Sherbrooke (ANIC, MV); Toorongo Falls (ANIC); Turtons Pass (ANIC); mts above Warburton (NMNH).

Distribution. Victoria.

Molophilus (Molophilus) rasilis Alexander (Fig. 173)

Molophilus rasilis Alexander, Ann. Mag. nat. Hist. (9) 19:192 (1927).

Primary type. Holotype of: Tasmania, Wilmot, 8. 1. 1923, A. Tonnoir (ANIC); seen; genitalia in poor condition, only partly detectable. Published records. Tasmania: Wilmot (ALEXANDER 1927b: 193).

Genitalia. Male hypopygium (Fig. 173) with the ventral lobe of the gonocoxite produced into a long slender lobe, the mesal face with abundant setulae and fewer scattered erect setae that tend to become retrorse at the apex; outer face of the lobe with fewer scattered large setae; dorso-mesal angle of gonocoxite produced into a low rounded lobe. Gonostyli placed close together in the notch between the lobes of the gonocoxite. Outer gonostylus with a short stout stem, the arms slender, especially the outer arm which is more than twice the length of the stem, sinuous, gradually narrowed to the slightly spatulate apex; inner arm much shorter, about equal in length to the stem, gently arcuated. Inner gonostylus a powerful blackened rod, terminating in a slender curved spine, with a similar straight spine on the face at about two-thirds the length of the style, the area between these spines with numerous very long erect setae that are approximately as long as the spines. Aedeagus long and slender, tapering to the slender apex, in balsam mounts extending caudad to nearly opposite midlength of the ventral lobe of the gonocoxite. Remarks. Not similar to any other described

Remarks. Not similar to any other described species. A clear interpretation is not possible at

the present.

New records. None.

Distribution. Tasmania.

Molophilus (Molophilus) plagiatus group (Fig. 18)

Molophilus plagiatus group (M. plagiatus subgroup + M. annulipes subgroup), sensu Alexander (1927a, 1929b).

Molophilus (M.) plagiatus group, sensu Theischinger (1988a).

Definition. Male hypopygium with mostly only the ventral lobe of gonocoxite well developed, rarely also the dorsal, exceptionally the mesal; ventral lobe always prominent and with apical beak or hook. Parameres fused.

Distribution in Australia. Eastern and southwestern.

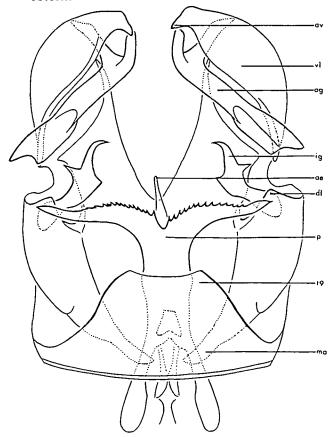


Fig. 18. Molophilus (Molophilus) mawiliri sp. n., male hypopygium, dorsal aspect. Abbreviations: ae = aedeagus; av = apical beak of ventral lobe of gonocoxite; dl = dorsal lobe of gonocoxite; ig = inner gonostylus; ma = mesodorsal apodeme of gonocoxite; og = outer gonostylus; p = parameres; t9 = tergite 9; vl = ventral lobe of gonocoxite.

The Australian species of the *Molophilus* (*Molophilus*) plagiatus group(in alphabetical order):

abitus ALEX. abortivus ALEX. acutissimus Thei. adamantinus ALEX. akama sp. n. annulipes Skuse arcanus ALEX. atnaterta sp. n. barretti Alex. beri sp. n. biaga sp. n. bilyarra sp. n. binnaburra Thei. bogongensis ALEX. bucerus Alex. cingulipes ALEX. danielsi Thei. distinctissimus ALEX. duckhousei sp. n. duplex ALEX. eboracensis ALEX. electus Alex. errabunga sp. n. erricha sp. n. eurygramma ALEX. exiguus ALEX. femoratus Skuse filistylus ALEX. flavidellus ALEX. flavonotatus Skuse furvus ALEX. fusiformis ALEX. gemellus ALEX. gilvus ALEX. hollowayi Thei. inaequidens ALEX. indivisus ALEX. janus ALEX. kaandha sp. n. kama sp. n. karaka sp. n. keda sp. n. kokora sp. n. kuniekoondie sp.n. kutha sp. n. laevistylus ALEX.

longicornis Skuse longifurcatus Thei. longioricornis ALEX. macalpinei Thei. mackerrasi ALEX. maniimupensis Thei. mawiliri sp.n. metpadinga sp. n. militaris ALEX. mirla sp. n. mouldsi Thei. nerriga sp. n. obliteratus ALEX. occidentalis Thei. padmuri sp. n. parannulipes sp. n. parviserratus ALEX. parvistylus ALEX. pauperculus ALEX. pengana sp. n. perdistinctus ALEX. perluteolus ALEX. perpendicularis ALEX. persimilis ALEX. pimelia Thei. plumbeiceps ALEX. poecilonota ALEX. subannulipes ALEX. ternatus ALEX. titania ALEX. translucens Skuse tuta sp. n. tuu sp. n. ulbracullima sp. n. uniguttatus ALEX. vallisspei Thei. walpole Thei. warroo sp. n. waukatte sp. n. willara sp. n. williamsi sp. n. womba sp. n. worraworra sp. n. zenta Thei.

Molophilus (Molophilus) adamantinus Alex-ANDER (Fig. 174)

Molophilus adamantinus Alexander, Ann. mag. nat. Hist. (9) 19: 180 (1927).

Primary type. Holotype of: Tasmania, Lake Margaret, 2500 ft, 3. 2. 1923, A. Tonnoir (ANIC); seen; genitalia missing.

Published records. Tasmania: Lake Margaret, 2500 ft (Alexander 1927b: 181).

Genitalia. Male hypopygium, Fig. 174.

Remarks. Very similar to *M. exiguus* ALEX., similar to *M. atnaterta* sp. n. and *M. janus* ALEX.

New records. Tasmania: below Maxwell Ridge, trib. of Picton River above Reservoir Lakes, 800 m (MV).

Distribution, Tasmania.

Molophilus (Molophilus) exiguus Alexander (Fig. 175)

Molophilus exiguus Alexander, Ann. Mag. nat. Hist. (9) 19: 179 (1927).

Primary type. Holotype of: Tasmania, Zeehan, 200-300 ft, Feb. 1924, G. H. Hardy (supposedly in QM); not seen; genitalia in NMNH; seen. Published records. Tasmania: Zeehan, 200-300 ft (ALEXANDER 1927b: 180).

Genitalia. Male hypopygium (Fig. 175) with the ventral lobe of gonocoxite produced caudad into a broad fleshy lobe, the mesal-apical angle more conspicuously setiferous than the remainder, but otherwise unarmed. Gonostyli two, arising close together, the outer with a long stem, shallowly bifid at apex, the outer arm gently curved, the apex truncated and blackened, inner arm a triangular arched blade. Inner gonostylus a little longer and stouter, gently curved to the acute blackened apex, before the tip with a slender acute spine about twice the length of the latter. Aedeagus relatively short, but slender, arcuated.

Remarks. Very similar to *M. adamantinus* ALEX., similar to *M. atnaterta* sp. n. and *M. janus* ALEX.

New records. None.

Distribution. Tasmania.

Molophilus (Molophilus) atnaterta spec. nov. (Fig. 176)

Description. Colouration: largely brownish grey; head grey, antennae greyish brown; wings pale grey, halteres yellowish grey; legs dark yellowish to greyish brown.

Dimensions. Wing length, male 4,5-4,6 mm, female 5,2 mm.

Genitalia. Male hypopygium, Fig. 176.

Remarks. Similar to *M. adamantinus* ALEX. and *M. exiguus* ALEX. Most similar to *M. janus* ALEX. Diagnostic for *M. atnaterta* is the basal spine on the inner gonostylus.

Material examined. Holotype O: Victoria, Mt Baw Baw, 4400 ft, 30. 1. 1964, N. Dobrotworsky (ANIC). Paratypes: Victoria 1 O, 1 Q, same data as holotype (ANIC, GT).

Distribution. Victoria.

Name. Atnaterta (Australian Aboriginal word for "scorpion") refers to the conspicuous spine on the base of the inner gonostylus.

Molophilus (Molophilus) janus Alexander (Fig. 177)

Molophilus janus Alexander, Ann. Mag. nat. Hist. (10) 5: 370 (1930).

Primary type. Holotype O: Victoria, Bogong High Plains, 5600-6000 ft, Jan. 1928, F. E. Wilson (MV); seen.

Published records. Victoria: Bogong High Plains, 5600-6000 ft (ALEXANDER 1930: 371). Genitalia. Male hypopygium, Fig. 177.

Remarks. Most similar to *M. atnaterta* sp. n., similar to *M. adamantinus* ALEX. and *M. exiguus* ALEX.

New records. Victoria: Bogong High Plains (ANIC).

Distribution. Victoria.

Molophilus (Molophilus) abitus Alexander (Figs 178, ?179)

Molophilus abitus Alexander, Proc. Linn. Soc. N. S. W. 69: 10 (1944).

Primary type. Holotype O: New South Wales, Cascade, Jan. 1914, F. E. Wilson (MV); seen.

Published records. New South Wales: Cascade (ALEXANDER 1944: 10).

Previous illustrations. ALEXANDER 1944: Fig. 3. Genitalia. Male hypopygium, Figs 178, ?179. Remarks. Similar to *M. fusiformis* ALEX. and *M. williamsi* sp. n.

New records. New South Wales: 33 mi Dorrigo-Coramba Rd (ANIC).

Distribution. New South Wales (NEN).

Molophilus (Molophilus) fusiformis Alexander (Fig. 180)

Molophilus fusiformis Alexander, Proc. Linn. Soc. N. S. W. 59: 179 (1934).

Primary type. Holotype of: New South Wales, Dorrigo, eastern Dorrigo, 2000 ft, 12. 2. 1933, W. Heron (NMNH); seen.

Published records. New South Wales: Dorrigo, eastern Dorrigo, 2000 ft (ALEXANDER 1934: 180).

Previous illustrations. ALEXANDER 1934: Fig. 1. Genitalia. Male hypopygium (Fig. 180) with the apical beak of gonocoxite blackened and irregular in outline, not forming a smooth structure as usual in the group. Outer gonostylus with the outer arm truncated and microscopically toothed at apex. Inner gonostylus a black nearly straight to slightly arcuate rod of moderate stoutness, on distal third gradually narrowed into a spinous point; surface of style with a few microscopic punctures. Parameres a pale oval cushion, clothed with delicate setulae.

Remarks. Similar to M. abitus ALEX. and M. williamsi sp. n.

New records. None.

Distribution. New South Wales (NEN).

Molophilus (Molophilus) williamsi spec. nov. (Fig. 181)

Description (O). Colouration: largely greyish yellow; head and antennae brownish grey; mesonotum largely brownish grey; wings pale greyish yellow, halteres whitish yellow; legs greyish yellow.

Dimensions. Wing length 3,7 mm.

Genitalia. Hypopygium, Fig. 181.

Remarks. Similar to *M. abitus* ALEX. and *M. fusiformis* ALEX. Diagnostic for *M. williamsi* are the large, basally enlarged, divergent inner gonostyli.

Material examined. Holotype O: New South Wales, Lorien Ref., 3 km N Lansdowne, near Taree, rain forest margin, 27. 4. - 3. 5. 1987, malaise trap, G. Williams (ANIC). Paratypes: New South Wales: 1 O, type locality, 5.-12. 4. 1987, G. Williams (GT).

Distribution. New South Wales (NEN).

Name. This species is dedicated to Mr G. Williams (Lansdowne), collector of many interesting rain forest tipulids.

Molophilus (Molophilus) acutissimus Theischinger (Fig. 182)

Molophilus (Molophilus) acutissimus Theischinger, Stapfia 17: 178 (1988).

Primary type. Holotype of: Queensland, Moses Creek, 4 km N by E of Mt Finnigan, 15. 10. 1980, malaise trap, D. H. Colless (ANIC); seen. Published records. Queensland: Moses Creek, 4 km N by E of Mt Finnigan (Theischinger 1988a: 179).

Previous illustrations. The Ischinger 1988a: Fig. 16.

Genitalia. Male hypopygium, Fig. 182.

Remarks. Similar to M. binnaburra THEI., M. mirla sp. n. and M. tuta sp. n.

New records. None.

Distribution. Queensland (CY).

Molophilus (Molophilus) binnaburra Theischinger (Fig. 183)

Molophilus (Molophilus) binnaburra Theischinger, Stapfia 17: 179 (1988).

Primary type. Holotype O: Queensland, Binna Burra, Lamington National Park, 29. 5. 1966, Z. Liepa (ANIC); seen.

Published records. Queensland: Binna Burra, Lamington National Park (Theischinger 1988a: 179).

Previous illustrations. Theischinger 1988a: Fig.17.

Genitalia. Male hypopygium, Fig. 183.

Remarks. Similar to M. acutissimus Thei., M. mirla sp. n. and M. tuta sp. n.

New records. None.

Distribution. Queensland (SEQ).

Molophilus (Molophilus) mirla spec. nov. (Fig. 184)

Description (O). Colouration: largely pale greyish yellow; head pale yellowish grey, antennaedull yellow; wings pale greyish yellow, halteres greyish white; legs greyish yellow to pale greyish brown.

Dimensions. Wing length 4,6 mm.

Genitalia. Hypopygium, Fig. 184.

Remarks. Most similar to *M. tuta* sp. n. Diagnostic for *M. mirla* is the almost straight inner gonostylus.

Material examined. Holotype O: New South Wales, Canoe Creek, Colo River, 27. 4. 1987, G. Theischinger (ANIC).

Distribution. New South Wales (SEN).

Name. Mirla (Australian Aboriginal word for ,,throwing stick") refers to the shape of the inner gonostylus.

Molophilus (Molophilus) tuta spec. nov. (Fig. 185)

Description (O), Colouration: largely pale to dark yellowish grey; head pale grey, antennae yellowish grey; wings and halteres greyish yellow; legs pale greyish brown.

Dimensions. Wing length 3,0 mm.

Genitalia. Hypopygium, Fig. 185.

Remarks. Most similar to *M. mirla* sp. n. Diagnostic vor *M. tuta* is the strongly curved inner gonostylus.

Material examined. Holotype O: Queensland, S of Ravenshoe, Evelyn Tableland, 350 m, light trap, 10. 3. 1956, J. L. Gressitt (ANIC). Paratype: Queensland: 1 O, Paluma, 900 m, malaise trap, 9.—14. 1. 1989, H. and A. Howden (GT).

Distribution. Queensland (NEQ).

Name. Tuta (Australian Aboriginal word for

"palm leaf") refers to the shape of the distal portion of the inner gonostylus.

Molophilus (Molophilus) kutha spec. nov. (Fig. 186)

Description (O). Colouration: largely dark greyish brown; head and antennae dark brownish grey; wings pale brownish grey, halteres whitish grey; legs dark yellowish to brownish grey.

Dimensions. Wing length 3,3—4,1 mm.

Genitalia. Hypopygium, Fig. 186.

Remarks. Not similar to any other described species. Diagnostic for *M. kutha* is the strongly arched, subapically enlarged, pointed inner gonostylus.

Material examined. Holotype of: New South Wales, Mooraback, Werrikimbe National Park, 980 m, 6. 12. 1986, G. Theischinger (ANIC). Paratypes: New South Wales: 4 of, Cockerawombeeba Creek, 23 km WNW Bellangry, 730 m, 8. 12. 1986, G. Theischinger (GT).

Distribution. New South Wales (NEN).

Name. Kutha (Australian Aboriginal word for "club") refers to the club-shaped inner gonostylus.

Molophilus (Molophilus) longioricornis Alexander (Fig. 187)

Molophilus longioricornis Alexander, Can. Ent. 53: 210 (1921).

Molophilus (Molophilus) longioricornis Alexander; Theischinger, Stapfia 17: 185 (1988).

Primary type. Holotype O: Queensland, Babinda, 17.8. 1920, J. F. Illingworth (NMNH); seen.

Published records. Queensland: Babinda (ALEX-ANDER 1921: 210); Birthday Ck, 6km NW by W of Paluma (Theischinger 1988a: 185).

Previous illustrations. Theischinger 1988a: Fig.25.

Genitalia. Male hypopygium, Fig. 187.

Remarks. Not very similar to any other described species.

New records. None.

Distribution. Queensland (NEO).

Molophilus (Molophilus) eboracensis Alex-Ander (Fig. 188)

Molophilus (Molophilus) eboracensis Alexander, Proc. Linn. Soc. N. S. W. 69: 10 (1944).

Primary type. Holotype O: New South Wales, Ebor, Jan. 1934, F. E. Wilson (MV); seen; genitalia missing.

Published records. New South Wales: Ebor (ALEXANDER 1944: 11).

Previous illustrations. ALEXANDER 1944: Fig. 4. Genitalia. Male hypopygium (Fig. 188) with the beak of gonocoxite unusually slender. Outer gonostylus with the apical fork relatively shallow, the inner blade short. Inner gonostylus a powerful straight rod, near apex bent at more than a right angle and thence produced into a long, straight, slender spine, the surface of which has a few setigerous punctures; distal half of style, before the bend, with conspicuous blackened spinous points, those of the inner margin larger and erect, on the outer edge even more conspicuous but few in number. Parameres oval, densely long-hairy. Aedeagus relatively slender.

Remarks. Similar to *M. akama* sp. n., *M. kaandha* sp. n. and *M. willara* sp. n.

New records. None.

Distribution. New South Wales (NEN).

Molophilus (Molophilus) akama spec. nov. (Fig. 189)

Description (O). Colouration: largely yellowish to greyish brown; head and antennae brownish grey; wings and halteres pale to dark greyish brown; ventral half of pterothorax including coxae and trochanters pale brownish yellow; midleg greyish brown, fore and hind leg missing. Dimensions. Wing length 5,0 mm.

Genitalia. Hypopygium, Fig. 189.

Remarks. Most similar to *M. willara* sp. n., similar to *M. kaandha* sp. n. and *M. eboracensis* ALEX. Diagnostic for *M. akama* are the three long thin apical spines of the inner gonostylus. Material examined. Holotype σ : New South Wales, Mount Wilson, Blue Mountains, 18. 8. 1966, e. p. 27. 9. 1966, D. K. McAlpine (AM). Distribution. New South Wales (SEN).

Name. Akama (Australian Aboriginal word for "whale") refers to the shape of the inner gonostylus.

Molophilus (Molophilus) willara spec. nov. (Fig. 190)

Description (O). Colouration: largely dark brownish grey; head grey, antennae dark brown; wings and halteres pale yellowish to pale greyish brown; legs yellowish to dark greyish brown. Dimensions. Wing length 3,8 mm.

Genitalia. Hypopygium, Fig. 190.

Remarks. Very similar to *M. akama* sp. n., also similar to *M. eboracensis* ALEX. and *M. kaandha* sp. n. Diagnostic for *M. willara* is the shape of the three apical spines of the inner gonostylus, two of which are short.

Material examined. Holotype of: New South Wales, Fenwicks Creek, Doyles River State Forest, 1050m, 6.11.1986, D. J. Bickel (ANIC). Distribution. New South Wales (NEN).

Name. Willara (Australian Aboriginal word for "tomahawk") refers to the shape of the inner gonostylus.

Molophilus (Molophilus) kaandha spec. nov. (Fig. 191)

Description (O). Colouration: largely pale greyish yellow; head pale yellowish grey, antennae pale to dark greyish yellow; wings and halteres pale yellowish grey; legs whitish to yellowish grey, tarsal segments slightly darker than the rest.

Dimensions. Wing length 3,8 mm.

Genitalia. Hypopygium, Fig. 191.

Remarks. Similar to *M. akama* sp. n., *M. eboracensis* ALEX. and *M. willara* sp. n. Diagnostic for *M. kaandha* are the shape and the two long apical spines of the inner gonostylus.

Material examined. Holotype O: New South Wales, Point Lookout, 6. 2. 1988, G. Theischinger (ANIC).

Distribution. New South Wales (NEN).

Name. Kaandha (Australian Aboriginal word for "whale") refers to the shape of the inner gonostylus.

Molophilus (Molophilus) furvus Alexander (Fig. 192)

Molophilus furvus Alexander, Ann. Mag. nat. Hist. (9) 19: 196 (1927).

Primary type. Holotype O: New South Wales, Mt Wilson, 3475 ft, 19. 11. 1921, A. Tonnoir (ANIC); seen.

Published records. New South Wales: Mt Wilson, 3475 ft (Alexander 1927b: 196).

Genitalia. Male hypopygium, Fig. 192.

Remarks. Not very similar to any other described species.

New records. New South Wales: near Barren Ground (GT); Brown Mtn, near Bega (ANIC); Ebor (NMNH); Lucas Heights (GT); Mt Victoria (NMNH); Popran Creek, N of Sydney (GT); Woronora River, near Heathcote (GT). Distribution. New South Wales (NEN, SEN).

Molophilus (Molophilus) bucerus Alexander

Molophilus bucerus Alexander, Ann. Mag. nat. Hist. (9) 19: 33 (1927).

Primary type. Holotype of: Sassafras, Dandenong Range, 22. 10. 1922, A. Tonnoir (ANIC), seen; genitalia missing.

Published records. Victoria: Sassafras, Dandenong Range (ALEXANDER 1927a: 34). Genitalia. Male hypopygium with the gonocoxite terminating in a deep chitinized beak, the outer margin oblique, the base surrounded by numerous setae. Gonostyli widely separated. Outer gonostylus large, the stem pale, relatively short, the outer arm a dilated blade, the inner arm a smaller, transversely flattened spine. Inner gonostylus a long, slender, pale rod, nearly straight, extended into an apical blackened spine; at the base of the blackened portion with a smaller lateral spine closely appressed to the axis; distal half of style with small setiferous punctures. Aedeagus considerably shorter than the inner gonostylus. Remarks. Apparently similar to M. flavidellus ALEX. and M. kama sp. n. A clear interpretation

New records. None.

Distribution. Victoria.

is not possible at the present.

Molophilus (Molophilus) flavidellus Alexander (Fig. 193)

Molophilus flavidellus Alexander, Ann. Mag. nat. Hist. (10) 5: 374 (1930).

Primary type. Holotype of: Victoria, Ben Cairn, near Millgrove, in beech gully, 2900—3200 ft, Feb. 1929, F. E. Wilson (MV), seen.

Published records. Victoria: Belgrave; Ben Cairn, near Millgrove, 2900—3200 ft (both ALEXANDER 1930: 375).

Genitalia. Male hypopygium, Fig. 193.

Remarks. Similar to M. bucerus ALEX. and M. kama sp. n.

New records. Victoria: Bulga National Park, West Gippsland (MV); Olinda (NMNH); O'Shannessy River (MV); Tarra Valley National Park, West Gippsland (MV); Toorongo Falls (ANIC).

Distribution. Victoria.

Molophilus (Molophilus) kama spec. nov. (Fig. 194)

Description (O). Colouration: largely pale greyish yellow; head and antennae pale yellow; wings and halteres yellowish white; legs pale yellow to greyish yellow, tarsal segments, particularly distal portion, somewhat darker than the rest.

Dimensions. Wing length 5,2 mm.

Genitalia. Hypopygium, Fig. 194.

Remarks. Similar to *M. bucerus* ALEX. and *M. flavidellus* ALEX. Diagnostic for *M. kama* is the absence of a subapical tooth on the inner gonostylus.

Material examined. Holotype of: Victoria, Mt Donna Buang, 20.—23. 2. 1987, G. Theischinger (ANIC).

Distribution. Victoria.

Name. Kama (Australian Aboriginal word for "spear") refers to the shape of the innergonostylus.

Molophilus (Molophilus) femoratus Skuse (Fig. 195)

Molophilus femoratus Skuse, Proc. Linn. Soc. N. S. W. 4: 805 (1890).

Molophilus femoratus Skuse; Alexander, Proc. Linn. Soc. N. S. W. 54: 140 (1929).

Primary type. Holotype Q: New South Wales, Lawson, Blue Mts, Jan., Masters (ANIC); seen. Published records. New South Wales: Lawson, Blue Mts; Mt Wilson, Blue Mts; Wentworth Falls, Blue Mts (all Skuse 1890: 805, and Alexander 1929b: 140).

Previous illustrations. ALEXANDER 1929b: Fig. 3. Genitalia. Male hypopygium, Fig. 195.

Remarks. Similar to M. filistylus ALEX. and M. militaris ALEX.

New records. New South Wales: Mt Wilson (NMNH).

Distribution. New South Wales (SEN).

Molophilus (Molophilus) filistylus Alexander (Fig. 196)

Molophilus filistylus Alexander, Ann. Mag. nat. Hist (9) 19: 35 (1927).

Primary type. Holotype O: Victoria, Sassafras, Dandenong Ranges, 20. 10. 1922, A. Tonnoir (ANIC); seen.

Published records. Victoria: Sassafras, Dandenong Ranges (ALEXANDER 1927a: 36). Genitalia. Male hypopygium, Fig. 196.

Remarks. Similar to *M. femoratus* Skuse and *M. militaris* ALEX.

New records. Victoria: Belgrave (NMNH); Cumberland Creek (ANIC); 5 mi. N Foster (ANIC); Maroondah (ANIC); Mt Baw Baw, 3600—4000 ft (ANIC); Mt Donna Buang, 3800—4000 ft (NMNH); Sherbrooke (ANIC). Distribution. Victoria.

Molophilus (Molophilus) militaris Alexander (Fig. 197)

Molophilus militaris Alexander, Ann. Mag. nat. Hist. (10) 7: 153 (1931).

Primary type. Holotype of: Victoria, Belgrave, in fern gully, 14. 7. 1929, F. E. Wilson (MV). Published records. Victoria: Belgrave; Kinglake, ca. 2500 ft; Warragul (all ALEXANDER 1931a: 154).

Genitalia. Male hypopygium, Fig. 197.

Remarks. Similar to M. femoratus Skuse and M. filistylus ALEX.

New records. Victoria: Gelibrand (MV); Kinglake (ANIC); Maroondah (ANIC), West Orbost (ANIC); Sassafras (MV); Sherbrooke (ANIC); Toorloo Arm, Gippsland (ANIC); Trafalgar (NMNH).

Distribution. Victoria.

species. According to Alexander (1934) allied to M. bucerus Alex.

New records. Victoria. Crowes, Otways (NMNH); Lorne (ANIC).

Distribution. Victoria.

Molophilus (Molophilus) bilyarra spec. nov. (Fig. 198)

Description (O). Colouration: largely pale greyish to brownish yellow; head and antennae brownish yellow; wings and halteres pale greyish yellow; legs brownish yellow with apex of femora and tibia slightly darkened.

Dimensions. Wing length 4,3—4,6 mm.

Genitalia. Hypopygium, Fig. 198.

Remarks. Not very similar to any other described species. Diagnostic for *M. bilyarra* is the shape of the inner gonostylus which resembles the talon of an eagle.

Material examined. Holotype O: Victoria, Mt Beauty, 21. 10. 1961, D. H. Colless (ANIC). Paratype: Victoria: 1 O, same data as holotype (GT).

Distribution. Victoria.

Name. Bilyarra (Australian Aboriginal word for "eagle") refers to the talon-shaped inner gonostylus.

Molophilus (Molophilus) ternatus Alexander (Fig. 199)

Molophilus ternatus Alexander, Proc. Linn. Soc. N. S. W. 59: 180 (1934).

Primary type. Holotype O: Victoria, Beech Forest, Turton's Pass, Otway Peninsula, 11.—19. 1. 1932, F. E. Wilson (MV); seen.

Published records. Victoria. Beech Forest, Turton's Pass, Otway Peninsula (ALEXANDER 1934: 181).

Previous illustrations. ALEXANDER 1934: Fig. 3. Genitalia. Male hypopygium, Fig. 199.

Remarks. Not very similar to any other described

Molophilus (Molophilus) arcanus Alexander

Molophilus arcanus Alexander, Ann. Mag. nat. Hist. (9) 20: 371 (1927).

Primary type. Holotype of. Tasmania, Mt Wellington, 25. 11. 1922, A. Tonnoir (ANIC); seen; genitalia missing.

Published records. Tasmania: Mt Wellington (ALEXANDER 1927: 372).

Genitalia. Male hypopygium with the ventral lobes of the gonocoxites produced, as in the group, terminating in a tiny feebly chitinized beak, the integument surrounding this beak with abundant yellow setae. Outer gonostylus very large and powerful, the stem short and broad, the arms large, blackened, both truncated. Inner gonostylus very small, shorter than the stem of the outer gonostylus, a feebly chitinized rod that gradually narrows to the slender tip, the surface and apex feebly tuberculate. Aedeagus relatively long, moderately stout, approximately three times as long as the inner gonostylus.

Remarks. Apparently close to *M. parvistylus* ALEX. A clear interpretation and illustration are not possible at the present.

New records. None.

Distribution. Tasmania.

Molophilus (Molophilus) parvistylus Alexander (Fig. 200)

Molophilus parvistylus Alexander, Ann. Mag. nat. Hist. (9) 19: 23 (1927).

Primary type. Holotype of: Tasmania, Mt Wellington, 28. 11. 1922, A. Tonnoir (ANIC); seen.

Published records. Tasmania: Burnie; Eaglehawk Neck; Mt Field; Mt Wellington (all ALEXANDER 1927: 24).

Genitalia. Male hypopygium, Fig. 200.

Remarks. Apparently similar to M. arcanus ALEX.

New records. New South Wales: Barrington Tops (GT); Megalong Valley (NMNH); Mt Victoria (NMNH); Mt Wilson, Blue Mts (NMNH). Victoria: Mt Baw Baw (ANIC); 10 mi. E of Beech Forest (ANIC): Belgrave (NMNH); Ben Cairn (ANIC); Bogong (ANIC); Cumberland Ck (ANIC); Mt Donna Buang, 3800-4000 ft (NMNH); Grampians (NMNH); 17 mi SW Lake Mtn, 3000 ft (ANIC); Marysville, Cumberland Valley (NMNH); Maroondah (ANIC); mts above Millgrove (NMNH); Olinda (NMNH); Sherbrooke (ANIC); Simpson's Ck, Gippsland (ANIC); Warburton, 3000-4000 ft (NMNH); Wilson's Promontory, Chinaman's Ck (ANIC). Tasmania: Burnie (NMNH); Cradle Valley (NMNH); National Park (NMNH); Mt Wellington (NMNH).

Distribution. New South Wales (NEN, SEN), Victoria, Tasmania.

Molophilus (Molophilus) arcuarius Alexander (Fig. 201)

Molophilus arcuarius Alexander, Ann. Mag. nat. Hist. (10) 5: 375 (1930).

Primary type. Holotype O: Victoria, Ben Cairn, near Millgrove, in beech gully, 2900-3100 ft, 9. 2. 1929, F. E. Wilson (MV); seen; genitalia missing.

Published records. Victoria: Ben Cairn, near Millgrove, 2900-3100 ft (ALEXANDER 1930: 376).

Genitalia. Male hypopygium, Fig. 201.

Remarks. Similar to M. bogongensis ALEX., M. hollowayi Thei., M. keda sp. n. and M. warroo sp.n.

New records. Victoria: Mt Donna Buang, above Warburton, 4000 ft (NMNH); Mt Donna Buang, Warburton 3000-3800 ft (NMNH); Olinda (NMNH).

Distribution. Victoria.

Molophilus (Molophilus) bogongensis ALEX-ANDER (Fig. 202)

Molophilus bogongensis Alexander, Ann. Mag. nat. Hist. (10) 3: 330 (1929).

Primary type. Holotype O: Victoria, Bogong High Plains, 5600—6000 ft, Jan. 1928, F. E. Wilson (MV); seen; genitalia missing.

Published records. Victoria: Bogong High Plains, 5600—6000 ft (ALEXANDER 1929a: 331). Genitalia. Male hypopygium, Fig. 202.

Remarks. Similar to M. arcuarius Alex., M. hollowayi Thei., M. keda sp. n. and M. warroo sp. n.

New records. Victoria: Bogong, Howmans (ANIC).

Distribution. Victoria.

Molophilus (Molophilus) hollowayi Theischinger (Fig. 203)

Molophilus (Molophilus) hollowayi Theischinger, Stapfia 17: 180 (1988).

Primary type. Holotype O: Queensland, Dalrymple Heights District, Mt Williams, Site 15, 21°00'S/148°36'E, 1120 m, 21. 4. 1975, malaise trap, G. A. Holloway (AM); seen.

Published records. Queensland: Dalrymple Heights District, Mt Williams, 1120 m (Theischinger 1988a: 181).

Previous illustrations. Theischinger 1988a: Fig. 19.

Genitalia. Male hypopygium, Fig. 203.

Remarks. Similar to M. arcuarius ALEX., M. bogongenis ALEX., M. keda sp. n. and M. warroo sp. n.

New records. None.

Distribution. Queensland (NEQ).

Molophilus (Molophilus) keda spec. nov. (Fig. 204)

Description (O). Colouration: largely greyish yellow to brownish grey; head brownish grey, antennae dark greyish yellow; wings and halteres pale greyish yellow; legs greyish yellow to brownish grey.

Dimensions. Wing length 3,2—4,0 mm.

Genitalia. Hypopygium, Fig. 204.

Remarks. Most similar to *M. arcuarius* ALEX. Diagnostic for *M. keda* is the long, almost straight, smooth apex of the inner gonostylus. Material examined. Holotype O: New South Wales, Mt Banda Banda, 1200 m, 8. 12. 1986, G. Theischinger (ANIC). Paratypes: New South Wales: 7 O, same data as holotype (GT); 1 O, Cockerawombeeba Creek, 23 km WNW Bellangry, 730 m, 8. 12. 1986, G. Theischinger (GT).

Distribution. New South Wales (NEN).

Name. Keda (Australian Aboriginal word for "boomerang") refers to the shape of the inner gonostylus.

Molophilus (Molophilus) warroo spec. nov. (Fig. 205)

Description (O). Colouration: largely dark brownish grey; head dark grey, antennae dark brown; wings and halteres yellowish to pale greyish brown; legs dark yellowish to greyish brown.

Dimensions. Wing length 3,8—4,1 mm.

Genitalia. Hypopygium, Fig. 205.

Remarks. Most similar to *M. arcuarius* ALEX. Diagnostic for *M. waroo* is the angulated inner gonostylus.

Material examined. Holotype of. Victoria, Bogong High Plains, 22. 1. 1965, N. Dobrotworsky (ANIC). Paratypes: Victoria: 1 of, same data as holotype (GT); 1 of, Bogong, 24. 1. 1965, N. Dobrotworsky (ANIC).

Distribution. Victoria.

Name. Waroo (Australian Aboriginal word for "boomerang") refers to the shape of the inner gonostylus.

Molophilus (Molophilus) worraworra spec. nov. (Fig. 206)

Description (O). Colouration: largely greyish yellow to pale greyish brown; head and antennae yellowish grey; wings and halteres pale yellowish brown; legs yellowish to pale greyish brown.

Dimensions. Wing length 3,6 mm.

Genitalia. Hypopygium, Fig. 206.

Remarks. Most similar to M. laevistylus ALEX. and M. padmuri sp. n. Diagnostic for M. worraworra is the very thin, apically hooked, inner gonostylus.

Material examined. Holotype of: New South Wales, Bruxner Park, Coff's Harbour, 1. 11. 1965, M. S. Upton (ANIC).

Distribution. New South Wales (NEN).

Name. Worraworra (Australian Aboriginal word for "fighting stick") refers to the shape of the inner gonostylus.

Molophilus (Molophilus) laevistylus Alexander (Fig. 207)

Molophilus laevistylus Alexander, Proc. Linn. Soc. N. S. W. 69: 11 (1944).

Primary type. Holotype O: New South Wales, Cascade, Jan. 1934, F. E. Wilson (MV); seen; genitalia missing.

Published records. New South Wales: Cascade (ALEXANDER 1944: 12).

Previous illustrations. ALEXANDER 1944: Fig. 5. Genitalia. Male hypopygium (Fig. 207) with the beak of gonocoxite relatively stout and blackened, the tip subacute. Outer gonostylus relatively short and stout-stemmed, the apical fork relatively shallow. Inner gonostylus a little shorter than the outer stylus, appearing as a simple, very gently curved horn that narrows to the acute tip, on apical third with a few small scattered punctures but with no further armature. Parameres oval, the apex obtuse, the surface glabrous.

Remarks. Very similar to *M. padmuri* sp. n. New records. None.

Distribution. New South Wales (NEN).

Molophilus (Molophilus) padmuri spec. nov. (Fig. 208)

Description (O). Colouration: largely yellowish to greyish brown; wings pale yellowish grey; legs yellowish grey.

Dimesions. Wing length 2,8—3,0 mm.

Genitalia. Hypopygium, Fig. 208.

Remarks. Most similar to M. laevistylus ALEX.

Diagnostic for *M. padmuri* is the strongly arched, slender, inner gonostylus.

Material examined. Holotype of: New South Wales, Point Lookout, 6. 2. 1988, G. Theischinger (ANIC). Paratypes: Queensland: 2 of, Mt Glorious, rain forest, 24.—28. 2. 1961, L. and M. Gressitt (BPBM). New South Wales: 1 of, same data as holotype (GT).

Distribution. Queensland (SEQ), New South Wales (NEN).

Name. Padmuri (Australian Aboriginal word for "point") refers to the shape of the inner gonostylus.

Molophilus (Molophilus) gilvus Alexander (Fig. 209)

Molophilus gilvus Alexander, Ann. Mag. nat. Hist. (9) 19: 36 (1927).

Primary type. Holotype of: Tasmania, Mt Wellington, 25. 11. 1922, A. Tonnoir (ANIC); seen.

Published records. Tasmania: Eaglehawk Neck; Fern Tree; Geeveston; Hobart; Mt Wellington (all ALEXANDER 1927a: 37).

Genitalia. Male hypopygium, Fig. 209.

Remarks. Similar to M. fusiformis ALEX.

New records. Tasmania: Port Arthur (ANIC). Distribution. Tasmania.

Molophilus (Molophilus) womba spec. nov. (Fig. 210)

Description (O). Colouration: largely brownish grey; head grey, antennae brown; wings and halteres yellowish to pale greyish brown; legs very pale greyish brown.

Dimensions. Wing length 3,1 mm.

Genitalia. Hypopygium, Fig. 210.

Remarks. Most similar to *M. zenta* Thei. Diagnostic for *M. womba* are the divergent inner gonostyli.

Material examined. Holotype O: New South Wales, Port Macquarie, 26. 5. 1936, D. F. Waterhouse (ANIC).

Distribution. New South Wales (NEN).

Name. Womba (Australian Aboriginal word for "stone knife") refers to the particular shape of the inner gonostylus.

Molophilus (Molophilus) zenta Theischinger (Fig. 211)

Molophilus (Molophilus) zenta Theischinger, Stapfia 17: 188 (1988).

Primary type. Holotype O: Queensland, Beerburrum Ck, Beerburrum, 23. 5. 1966, Z. Liepa (ANIC); seen.

Published records. Queensland: Beerburrum Ck, Beerburrum; Woombye, near Nambour (both Theischinger 1988a: 189).

Previous illustrations. Theischinger 1988a: Fig. 30.

Genitalia. Male hypopygium, Fig. 211.

Remarks. Very similar to M. womba sp. n. and M. worraworra sp. n.

New records. None.

Distribution. Queensland (SEQ).

Molophilus (Molophilus) pauperculus Alex-Ander (Fig. 212)

Molophilus pauperculus Alexander, Ann. Mag. nat. Hist (10) 3: 329 (1929).

Primary type. Holotype O: New South Wales. Brooklana, Eastern Dorrigo, 2000 ft, 25. 12. 1927, W. Heron (NMNH); seen; genitalia in poor condition.

Published records. New South Wales: Brooklana, Eastern Dorrigo, 2000 ft (ALEXANDER 1929a: 330).

Genitalia. Male hypopygium (Fig. 212) with the beak of the gonocoxite stout, the apex subacute. Outer gonostylus with the stem short and stout, the arms broadly flattened. Inner gonostylus a simple slender blackened rod, the base expanded, pale, the distal half gently curved to an acute spine, the inner margin immediately before the apex with two or three smaller blunt teeth. Parameres an oval cushion, the apex truncated, the surface with microscopic setulae. Aedeagus long and slender.

Remarks. Very similar to *M. perluteolus* ALEX. New records. None.

Distribution. New South Wales (NEN).

Molophilus (Molophilus) perluteolus ALEX-ANDER (Fig. 213)

Molophilus perluteolus ALEXANDER, Ann. Mag. nat. Hist. (10) 5: 373 (1930).

Primary type. Holotype of: Victoria, Belgrave, in dark fern gully, 31. 3. 1929, F. E. Wilson (MV), seen.

Published records. Victoria: Belgrave (ALEX-ANDER 1930: 374).

Genitalia. Male hypopygium, Fig. 213.

Remarks. Very similar to *M. pauperculus* ALEX. New records. Victoria: Maroondah (ANIC), Walhalla (NMNH).

Distribution. Victoria.

Molophilus (Molophilus) barretti Alexander (Fig. 214)

Molophilus barretti Alexander, Ann. Mag. nat. Hist. (10) 3: 328 (1929).

Primary type. Holotype of: Victoria, Black Rock, 100 ft, 20. 5. 1927, C. Barrett (NMNH); seen.

Published records. Victoria: Bayswater; Black Rock; Ferntree Gully (all ALEXANDER 1929a: 329).

Genitalia. Male hypopygium, Fig. 214.

Remarks. Not very similar to any other described species.

New records. Victoria: Beenak (NMNH); Belgrave (NMNH); Dromana (ANIC); Macedon (NMNH); Walhalla (NMNH); Woodend (ANIC). Tasmania: Collinsvale, "Fairy Glen", 300 m (GT).

Distribution. Victoria, Tasmania.

Molophilus (Molophilus) biaga spec. nov. (Fig. 215)

Description. Colouration: largely yellowish to greyish brown; head and antennae brownish grey; wings pale greyish brown, halteres greyish yellow; legs yellowish grey with two darker rings in distal portion of femora and dark apex of tibiae; protibia, in addition, with dark subbasal ring.

Dimensions. Wing length, male 4,0—4,8 mm, female 4,6-5,0 mm.

Genitalia. Male hypopygium, Fig. 215.

Remarks. Very similar to *M. mackerrasi* ALEX. Diagnostic for *M. biaga* are the different shape and size of the two arms of the inner gonostylus. Material examined. Holotype \mathcal{O} : Tasmania, Huon Picton River jn, 18. 2. 1967, A. Neboiss (MV). Paratypes: Tasmania: 1Q, same data as holotype (MV); 1 \mathcal{O} , 1 Q, Redpa, 8. 12. 1962, N. Dobrotworsky (ANIC, GT).

Distribution. Tasmania.

Name. Biaga (Australian Aboriginal word for "hawk") refers to the talon—shaped inner gonostylus.

Molophilus (Molophilus) mackerrasi Alex-Ander (Fig. 216)

Molophilus mackerrasi Alexander, Ann. Mag. nat. Hist (9) 20: 369 (1927).

Primary type. Holotype of: New South Wales, Hogan's Brush, near Gosford, Aug., Masters and Skuse (ANIC); seen.

Published records. New South Wales: Hogan's Brush, near Gosford (Alexander 1927d: 370). Genitalia. Male hypopygium, Fig. 216.

Remarks. Very similar to M. biaga sp. n.

New records. Victoria: Buckland's, Gippsland (ANIC), Cabbage Tree Ck (ANIC); Grampians (ANIC); Otway Range (MV); 9 mi E of Stratford (ANIC); Wannon River, near Jimmy's Ck, Grampians (AM); Waratah Bay (ANIC); Wartook Reserve (ANIC).

Distribution. New South Wales (SEN), Victoria.

Molophilus (Molophilus) beri spec. nov. (Fig. 217)

Description (O). Colouration: largely dark yellowish to blackish grey; head brownish grey, antennae somewhat paler; wings and halteres pale greyish brown; legs pale to dark greyish brown.

Dimensions. Wing length 3,0—3,2 mm.

Genitalia. Hypopygium, Fig. 217.

Remarks. Similar to M. duplex ALEX., M. electus ALEX. and, possibly, M. abortivus ALEX.

Diagnostic for *M. beri* is the plump, claw-shaped inner gonostylus.

Material examined. Holotype O: Queensland, S of Ravenshoe, Evelyn Tableland, 350 m, light trap, 10. 3. 1956, J. L. Gressitt (ANIC). Paratype: Queensland: 1 O, Tulley Falls, light trap, 10. 3. 1956, J. L. Gressitt (BPBM).

Distribution. Queensland (NEQ).

Name. Beri (Australian Aboriginal word for "claw") refers to the shape of the inner gonostylus.

Molophilus (Molophilus) duplex Alexander (Fig. 218)

Molophilus duplex Alexander, Ann. Mag. nat. Hist (9) 19: 24 (1927).

Primary type. Holotype O: Tasmania, Eaglehawk Neck, 22. 11. 1922, A. Tonnoir (ANIC); seen.

Published records. Tasmania: Adventure Bay; Eaglehawk Neck; Mt Field; Hartz Mts; National Park, St Patrick River; Mt Wellington (all ALEXANDER 1927a: 25).

Genitalia. Male hypopygium, Fig. 218.

Remarks. Not very similar to any other described species.

New records. Tasmania: National Park (NMNH); Mt Wellington (NMNH).

Distribution, Tasmania.

Molophilus (Molophilus) abortivus Alexander

Molophilus abortivus Alexander, Ann. Mag. nat. Hist. (9) 19: 33 (1927).

Primary type. Holotype of: Tasmania, Eaglehawk Neck, 15. 11. 1922, A. Tonnoir (ANIC); seen; genitalia missing.

Published records. Tasmania: Eaglehawk Neck; Hartz Mts; National Park (all ALEXANDER 1927a: 33).

Genitalia. Male hypopygium with the apical beak of the gonocoxite very slender, pale. Outer gonostylus relatively short-stemmed, the head broadly dilated, curled into a partial circle, the inner angle relatively slender, the lateral angle broadly dilated. Inner gonostylus a simple

blackened rod, the apex directed laterad into a small acute black spine, with a slightly shorter, triangular tooth immediately basad of this on the same face, the two separated from one another by a U-shaped notch; the apical spine is less than one-fourth the length of the stem. Aedeagus pale, slender, gently sinuous, about one-half longer than the inner gonostylus. In the paratypes the spines of the inner gonostylus are a trifle longer but subequal in length to one another, less than one-half the length of the stem, the basal spine more obtuse at apex.

Remarks. According to ALEXANDER (1927a) closely allied to *M. electus* ALEX. A clear interpretation and illustration are not possible at the present.

New records. None.

Distribution. Tasmania.

Molophilus (Molophilus) electus Alexander (Fig. 219)

Molophilus electus Alexander, Ann. Mag. nat. Hist (9) 19: 32 (1927).

Primary type. Holotype of: Tasmania, Mt Wellington, 25. 11. 1922, A. Tonnoir (ANIC); seen.

Published records. Tasmania: Adventure Bay; Eaglehawk Neck; Geeveston; Hartz Mts; National Park; Mt Wellington (all ALEXANDER 1927a: 32, 33).

Genitalia. Male hypopygium, Fig. 219.

Remarks. According to ALEXANDER (1927a) M. abortivus ALEX., which cannot be interpreted at the present, is closely allied to M. electus.

New records. None.

Distribution, Tasmania.

Molophilus (Molophilus) annulipes Skuse (Fig. 220)

Molophilus annulipes Skuse, Proc. Linn. Soc. N. S. W. 4: 809 (1890).

Molophilus annulipes Skuse; Alexander, Proc. Linn. Soc. N. S. W. 54: 138 (1929).

Primary type: Lectotype of: New South Wales, no further data available (ANIC), seen.

Published records. New South Wales: several

localities mentioned (SKUSE 1890: 810) do not refer to *M. annulipes* (ALEXANDER 1929b: 138, 139).

Previous illustrations. ALEXANDER 1929 Fig. 1. Genitalia. Male hypopygium, Fig. 220.

Remarks. Similar to M. persimilis ALEX., M. cingulipes ALEX., M. nerriga sp. n., M. subannulipes ALEX. and M. obliteratus ALEX. New records. New South Wales: Tahmoor (ANIC).

Distribution. New South Wales (SEN).

Molophilus (Molophilus) persimilis Alexander (Fig. 221)

Molophilus persimilis Alexander, Ann. Mag. nat. Hist. (9) 19: 22 (1927).

Primary type. Holotype O: New South Wales, Blackheath, Blue Mts, 3500 ft, 15. 4. 1922, E. W. Ferguson (ANIC); seen; genitalia missing. Published records. New South Wales: Blackheath, Blue Mts, 3500 ft; Knappsack Gully, Blue Mts (both ALEXANDER 1927a: 23). Genitalia. Male hypopygium, Fig. 221.

Remarks. Similar to the group of species around *M. annulipes* SKUSE (see there).

New records. New South Wales: near Barren Ground (GT); Mt Victoria, Blue Mts (NMNH). Victoria: Buckland's, Gippsland (ANIC).

Distribution. New South Wales (SEN), Victoria.

Molophilus (Molophilus) cingulipes Alexander (Fig. 222)

Molophilus cingulipes Alexander, Ann. Mag. nat. Hist. (9) 19: 21 (1927).

Primary type. Holotype of: Tasmania, Mt Wellington, 29. 11. 1922, A. Tonnoir (ANIC); seen.

Published records. Tasmania: Fern Tree, Mt Wellington; Mt Wellington (both ALEXANDER 1927a: 22).

Genitalia. Male hypopygium, Fig. 222.

Remarks. Similar to the group of species around *M. annulipes* SKUSE (see there), most similar to *M. nerriga* sp. n.

New records. Tasmania: Mt Wellington (NMNH).

Distribution. Tasmania.

Molophilus (Molophilus) nerriga spec. nov. (Fig. 223)

Description (O). Colouration: largely yellowish to greyish brown; head brownish grey, antennae yellowish grey; scutellum pale yellow; wings pale greyish to brownish yellow with small dark spot near base, halteres yellowish to pale greyish brown; coxae and trochanters brownish yellow; mesofemur with two distinct black rings in distal half, remainder of midleg pale greyish brown; other legs missing.

Dimensions. Wing length 5,5 mm.

Genitalia. Hypopygium, Fig. 223.

Remarks. Similar to the group of species around *M. annulipes* Skuse (see there); most similar to *M. cingulipes* Alex. Diagnostic for *M. nerriga* is the shape of the distal portion of the very long inner gonostylus.

Material examined. Holotype O: New South Wales, 5 mi. NE Nerriga, 27. 11. 1962, I. F. B. Common and M. S. Upton (ANIC).

Distribution. New South Wales (SEN).

Name. Nerriga is the type locality of *M. nerriga*; it is to be regarded as an undeclinable noun in apposition to the generic name.

Molophilus (Molophilus) subannulipes ALEX-ANDER (Fig. 224)

Molophilus (Molophilus) subannulipes ALEXANDER, Studia ent. 20: 172 (1978).

Molophilus (Molophilus) subannulipes Alexander; Theischinger, Stapfia 17:186 (1988).

Primary type: Holotype O: Queensland, South Queensland, Hemmingsen (supposedly in NMNH, apparently lost); not seen.

Published records. Queensland: South Queensland (ALEXANDER 1978: 174).

Previous illustrations. Alexander 1978: Fig. 53; Theischinger 1988a: Fig. 27.

Genitalia. Male hypopygium (Fig. 224) with terminal beak of gonocoxite stout, blackened;

basal spine long and slender. Outer gonostylus very slender, the unequal terminal spines appressed. Inner gonostylus nearly four times broader than the outer one, bispinous at apex, the long axial spine broader, gently curved; inner point a long straight spine, subequal in size to the basal spine of the gonocoxite.

Remarks. Similar to the group of species around *M. annulipes* SKUSE (see there).

New records. None.

Distribution: Queensland (?SEQ).

Molophilus (Molophilus) obliteratus Alexander (Fig. 225)

Molophilus obliteratus Alexander, Ann. Mag. nat. Hist. (10) 7: 157 (1931).

Primary type. Holotype of: Victoria, Ben Cairn, near Millgrove, in beech gully, 2900-3200 ft, 9.
2. 1929, F. E. Wilson (MV); seen; genitalia missing.

Published records. Victoria: Ben Cairn, near Millgrove (ALEXANDER 1931:158).

Genitalia. Male hypopygium, Fig. 225.

Remarks. Similar to the group of species around *M. annulipes* SKUSE (see there).

New records. Victoria: Ben Cairn (ANIC); Millsite, 1000 m, Mt Baw Baw (MV); Mt Donna Buang (ANIC, NMNH); Spring Hill (ANIC).

Distribution. Victoria.

Molophilus (Molophilus) gemellus Alexander (Fig. 226)

Molophilus gemellus Alexander, Ann. Mag. nat. Hist. (9) 19: 19 (1927).

Primary type. Holotype of: Tasmania, Burnie, 25. 10. 1922, A. Tonnoir (ANIC); seen.

Published records. Tasmania: Burnie (ALEXANDER 1927a: 21).

Genitalia: Male hypopygium, Fig. 226.

Remarks. Similar to M. longifurcatus Thei., M. flavonotatus Skuse, M. parannulipes sp. n. and M. tuu sp. n.

New records. Victoria: Balnarring (NMNH). Distribution. Victoria, Tasmania.

Molophilus (Molophilus) longifurcatus Theischinger (Fig. 227)

Molophilus (Molophilus) longifurcatus Theischinger, Stapfia 17: 182 (1988).

Primary type. Holotype of: Western Australia, 1 mi. E of Jewel Cave, Augusta, 3. 10. 1970, D.H. Colless (ANIC); seen.

Published records. Western Australia: 1 mi E of Jewel Cave, Augusta; 8 mi. N of Bunbury (both Theischinger 1988a: 182).

Previous illustrations. Theischinger 1988a: Fig21.

Genitalia. Male hypopygium, Fig. 227.

Remarks. Similar to the group of species around M. gemellus ALEX. (see there).

New records. None.

Distribution. Western Australia (SWA).

Molophilus (Molophilus) flavonotatus Skuse (Fig. 228)

Molophilus flavonotatus Skuse, Proc. Linn. Soc. N. S. W. 4: 810 (1890).

Molophilus canus Skuse, Proc. Linn. Soc. N. S. W. 4: 811 (1890).

Molophilus evanidus Alexander, Ann. Mag. nat. Hist. (9) 12: 271 (1923).

Molophilus flavonotatus Skuse; Alexander, Proc. Linn. Soc. N. S. W. 54:139 (1929).

Primary types. Lectotype of M. flavonotatus Skuse: New South Wales, Sydney, Sep. (ANIC); seen. Lectotype of M. canus Skuse: New South Wales, Sydney (ANIC), seen. Holotype of M. evanidus Alexander: New Zealand, South Island, Ross, Westland, 17. 2. 1923, T. R. Harris (NMNH); seen.

Published records (from Australia). New South Wales: Sydney, Wentworth Falls, Blue Mts; Woy Woy (all ALEXANDER 1929b: 140). Tasmania: Burnie; Eaglehawk Neck; Geeveston; Mt Wellington; Tullah; Zeehan (all ALEXANDER 1929b: 140).

Previous illustrations. ALEXANDER 1929b: Fig. 2. Genitalia. Male hypopygium, Fig. 228.

Remarks. Similar to the group of species around *M. gemellus* ALEX. (see there).

New records. Queensland: Samford Valley, 14 mi. WNW of Brisbane (NMNH). New South Wales: Fitzroy Falls (ANIC); New England

National Park (ANIC); Stoney Ck, 77 km N of Windsor (ANIC); Mt Victoria (NMNH); Wentworth Falls, Blue Mts (NMNH); Mt Wilson (NMNH). Victoria: Beaconsfield (NMNH); NGrampians (ANIC); Lower Tarwin (ANIC); 10 mi. E of Stratford (ANIC); Warburton (NMNH). Tasmania: National Park (NMNH); Tullah (ANIC); Zeehan (NMNH). South Australia: Aldgate (NMNH); Second Vy Rd, Cape Jervis (ANIC).

Distribution. Queensland (SEQ), New South Wales (NEN, SEN), Victoria, Tasmania, South Australia (SES); New Zealand.

Molophilus (Molophilus) parannulipes spec. nov. (Fig. 229)

Description (O). Colouration: largely yellowish to greyish brown; head dark brownish grey, antennae pale brownish grey; mesonotum and mediotergite largely dark brownish grey, scutellum dull yellow; wings brownish yellow, halteres whitish to greyish yellow; coxae and trochanters greyish yellow, remainder of legs largely greyish brown, femora somewhat paler in subbasal quarter.

Dimensions. Wing length 4,8 mm.

Genitalia. Hypopygium, Fig. 229.

Remarks. Most similar to M. flavonotatus Skuse. Diagnostic for M. parannulipes is the subapically strongly widened inner gonostylus. Material examined. Holotype σ : Tasmania, Old and Collins River junction, 43°16'S/146°20'E, 10. 2. 1988, A. Neboiss (MV).

Distribution. Tasmania.

Name. Parannulipes (para = Greek for ,,close by") refers to the similarity to *M. annulipes* Skuse.

Molophilus (Molophilus) tuu spec. nov. (Fig. 230)

Description (O). Colouration: largely yellowish to greyish brown; head and antennae brownish grey; wings yellowish to pale greyish brown, halteres whitish to pale yellowish grey; legs yellowish to greyish brown.

Dimensions. Wing length 4,6-4,8 mm. Genitalia. Hypopygium, Fig. 230.

Remarks. Very similar to *M. flavonotatus* ALEX. and *M. longifurcatus* THEI. Diagnostic for *M. tuu* is the shape of the trifid inner gonostylus. Material examined. Holotype O: New South Wales, creeks near Lucas Heights, 15. 9. 1986, G. Theischinger (ANIC). Paratypes: New South Wales: 1 O, same data as holotype (GT); 1 O, Dahlia Swamp, near Woronora River, 4. 1. 1990, G. Theischinger and L. Müller (GT). Distribution. New South Wales (SEN).

Name. Tuu (Australian Aboriginal word for "spear with three prongs for spearing bony bream") refers to the shape of the inner gonostylus.

Molophilus (Molophilus) indivisus Alexander (Fig. 231)

Molophilus indivisus Alexander, Ann. Mag. nat. hist. (9) 20: 368 (1927).

Primary type. Holotype O: New South Wales, Sydney, 14. 9. 1923, E. W. Ferguson (ANIC); seen.

Published records. New South Wales: Sydney (ALEXANDER 1927d: 369).

Genitalia. Male hypopygium, Fig. 231.

Remarks. Very similar to *M. occidentalis* Thei., which was originally described as a subspecies of *M. indivisus*.

New records. New South Wales: Bendemeer (ANIC); Engadine (GT); Heathcote Brook (GT);Megalong Valley (NMNH); Murrumbidgee River, A. C. T. (NMNH), Sydney (NMNH). Victoria: Balnarring (NMNH); Bayswater (NMNH); Boolarra (ANIC); Eltham (NMNH); Grampians (NMNH); 5 mi N Grampians (ANIC); Gurdies (ANIC); Kangaroo Island (MV); Ravenswood (ANIC); Ringwood (NMNH); Sale (ANIC); Seville (NMNH); Simpson's Ck, Gippsland (ANIC); 10 mi E of Stratford (ANIC); 9ne Violet Town (ANIC); 12 mi. S Wangaratta (ANIC); Wartook Reserve (ANIC); Wattle Glen (NMNH); Woori Yallock (ANIC); You Yangs (ANIC). South Australia: Hahndorf (ANIC); Waterfall Gully, Burnside (ANIC); Wilpena Pond, Flinders Ranges (ANIC).

Distribution. New South Wales (NEN, SEN), Victoria, South Australia (SES).

Molophilus (Molophilus) occidentalis Theischinger, stat. nov. (Fig. 232)

Molophilus (Molophilus) indivisus occidentalis Theischinger, Stapfia 17: 181 (1988).

Primary type. Holotype of: Western Australia, Augusta, 3. 10. 1970, D. H. Colless (ANIC); seen.

Published records. Western Australia: Augusta; 8 mi N of Bunbury; 3 mi SW of Karridale; 1 mi E of Jewel Cave, Augusta; Margaret River, Rapids Crossing, 25 km S of Busselton; Pimelia, near Pemberton; 24 mi NW of Walpole (all THEISCHINGER 1988a: 182).

Previous illustrations. Theischinger 1988a: Fig. 20.

Genitalia. Male hypopygium, Fig. 232.

Remarks. Very similar to *M. indivisus* ALEX. Now considered specifically distinct as material recently studied from South Australia is typical *M. indivisus* ALEX.

New records. Western Australia: Augusta (ANIC); Nth Bannister (ANIC); Burker (ANIC); Darlington (ANIC); Dewars Pool (ANIC); 33 mi E of Esperance (ANIC); Fremantle (ANIC); Gingin, creek (ANIC); Gingin Brook, near Moore River jn, 12 km E of Guilderton (MV); Jarrahdale (ANIC); Mandijong, Medulla Ck (ANIC); Moore River (ANIC); Northcliffe (ANIC); Pemberton (ANIC); 24 mi. NW Pemberton (ANIC); Piesse Brook, Kalamunda (MV); Porongurup Range (ANIC); Stirling Range, Red Gum Pass (ANIC). Distribution. Western Australia (SWA).

Molophilus (Molophilus) perpendicularis Alexander (Fig. 233)

Molophilus perpendicularis Alexander, Proc. Linn. Soc. N. S. W. 69: 12 (1944).

Primary type. Holotype of: New South Wales, Cascade, Jan. 1934, F. E. Wilson (MV); seen; genitalia missing.

Published records. New South Wales: Cascade (ALEXANDER 1944: 13).

Previous illustrations. ALEXANDER 1944: Fig. 2. Genitalia. Male hypopygium (Fig. 233) with the beak of gonocoxite unusually small and insignificant, blackened; dorsal lobe of gonocoxite unarmed. Outer gonostylus long and sinuous, the bifid head black, the inner blade narrowed into an acutely pointed spine. Inner gonostylus about equal in length, blackened on less than distal half, narrowed into a curved blackened apical spine; at about three-fourths the length bearing a perpendicular black spine, with two or three small denticles in its outer axil; between the spine and the apex, on the same face, the style is expanded into a weak flange, provided with five or six setigerous punctures. Parameres broadly oval, the apex very obtuse; surface of plate densely and microscopically setulose. Aedeagus long and slender.

Remarks. Very similar to *M. waukatte* sp. n. New records. None.

Distribution. New South Wales (NEN).

Molophilus (Molophilus) waukatte spec. nov. (Fig. 234)

Description. Colouration: largely pale greyish yellow; head whitish grey, antennae dull yellow; wings pale dull yellow with small black spot at base, halteres pale whitish grey; legs pale to dull yellow, profemur with two slightly darker rings in distal half.

Dimensions: Wing length, male 3,2—3,4 mm, female 3,6—4,0 mm.

Genitalia. Male hypopygium, Fig. 234.

Remarks. Very similar to *M. perpendicularis* ALEX. Diagnostic for *M. waukatte* are the conspicuous dorsal subapical hump and the strongly developed apical beak of the ventral lobe of the gonocoxite.

Material examined. Holotype O: New South Wales, Washpool National Park, Coombadja Creek, 5.—6. 1. 1986, G. Theischinger and L. Müller (ANIC). Paratypes: New South Wales: 2 O, 5 Q, same data as holotype (ANIC, GT); 5 O, 7 Q, Macquarie Rivulet, 4. 1. 1980, G. Theischinger (GT).

Distribution. New South Wales (NEN, SEN). Name. Waukatte (Australian Aboriginal word for "small hawk") refers to the strongly developed apical beak of the ventral lobe of the gonocoxite.

Molophilus (Molophilus) eurygramma Alex-ANDER (Fig. 235)

Molophilus eurygramma Alexander, Ann. Mag. nat. Hist. (10) 3: 332 (1929).

Primary type. Holotype Q: New South Wales, Ulong, eastern Dorrigo, 2000 ft, 13. 1. 1927, W. Heron (NMNH); seen.

Published records. New South Wales: Ulong, eastern Dorrigo, 2000 ft (ALEXANDER 1929a: 332).

Original description (Q). Length about 2,8 mm; wing 3,6 mm.

Rostrum and palpi brown. Antennae pale basally, the flagellum pale brown. Head yellowish white, the centre of the vertex variegated with brown. Pronotum whitish. mesonotal praescutum with three light fulvous stripes that are quite confluent, the median stripe becoming darker in front; humeral region and lateral margins broadly white; scutum light fulvous; scutellum white; postnotum obscure brownish yellow, a little darker on the cephalic portion. Pleura white, the dorso-pleural region somewhat darker. Halteres white. Legs with the coxae and trochanters whitish; femora white, with two distinct black rings, the broadest one subterminal, the narrower one just beyond midlength of the segment, the pale ring between a little more extensive than the widest dark annulus, the pale apex subequal to the latter or a little less extensive; tibiae and tarsal segments 1 to 3 white, with the tips narrowly blackened or infuscated; terminal tarsal segments uniformly darkened. Wings with a strong yellowish tinge, a broad conspicuous brown area at the level of the arculus, extending from the costal margin at h, across the arculus to vein A1; veins yellow, macrotrichia darker, Venation: vein A1 relatively elongate, extending to nearly opposite the proximal end of cell M3; petiole of the latter more than twice m-cu. Abdomen obscure yellow, the caudal margins

of the tergites marrowly paler; sternites clearer yellow. Ovipositor with the long valves relatively straight, reddish horn-colour.

Remarks. Male unknown. Belongs, according to ALEXANDER (1929a), to the *M. plagiatus* group, *M. annulipes* subgroup.

New records. None.

Distribution. New South Wales (NEN).

Molophilus (Molophilus) mouldsi Theischinger (Fig. 236)

Molophilus (Molophilus) mouldsi Theischinger, Stapfia 17: 184 (1988).

Primary type. Holotype O: Queensland, Upper Freshwater Ck, Whitfield Ra., near Cairns, 15. 12. 1974, Moulds (ANIC); seen.

Published records. Queensland: Upper Freshwater Ck, Whitfield Ra., near Cairns (Theischinger 1988a: 185).

Previous illustrations. Theischinger 1988a: Fig. 24.

Genitalia. Male hypopygium, Fig. 236.

Remarks. Not very similar to any other described species.

New records. Queensland: Birthday Ck, 6 km by W of Paluma (ANIC).

Distribution. Queensland (NEQ).

Molophilus (Molophilus) vallisspei Theischinger (Fig. 237)

Molophilus (Molophilus) vallisspei Theischinger, Stapfia 17: 187 (1988).

Primary type. Holotype O: Queensland, 15°16'S/144°59'E, 14 km W by N Hope Vale Mission, 9. 5. 1981, malaise trap, D. H. Colless (ANIC); seen.

Published records. Queensland: 14 km W by N Hope Vale Mission (Theischinger 1988a: 187). Previous illustrations. Theischinger 1988a: Fig28.

Genitalia. Male hypopygium, Fig. 237.

Remarks. Not very similar to any other described species.

New records. None.

Distribution. Queensland (CY).

Molophilus (Molophilus) danielsi Theischinger (Fig. 238)

Molophilus (Molophilus) danielsi Theischinger, Stapfia 17: 180 (1988).

Primary type. Holotype O: Queensland, 27°23'S/152°47'E, Samford, 19.9. 1986, MV-lamp, G. Daniels (QM); seen.

Published records. Queensland: Samford (Theischinger 1988a: 180).

Previous illustrations. Theischinger 1988 Fig. 18.

Genitalia. Male hypopygium, Fig. 238.

Remarks. Very similar to *M. longicornis* SKUSE. New records. None.

Distribution. Queensland (SEQ).

Molophilus (Molophilus) longicornis Skuse (Fig. 239)

Molophilus longicornis Skuse, Proc. Linn. Soc. N. S. W. 4: 814 (1890).

Molophilus fuscolineatus Alexander, Ann. Mag. nat. Hist. (10) 3: 331 (1929).

Molophilus longicornis Skuse; Alexander, Proc. Linn. Soc. N. S. W. 54: 141 (1929).

Molophilus longicornis Skuse; Theischinger, Stapfia 17: 180 (1988).

Primary types. Lectotype of of M. longicornis Skuse: New South Wales, Berowra, Aug., Masters (ANIC); seen. Holotype of of M. fuscolineatus Alexander: New South Wales, Ulong, Eastern Dorrigo, ca. 2000 ft, 12. 1. 1927, W. Heron (NMNH); seen.

Published records. New South Wales: Berowra; Knapsack Gully, Blue Mts (both Skuse 1890: 815); Ulong, Eastern Dorrigo, ca. 2000 ft (ALEXANDER 1929a: 331). Victoria: Millgrove (ALEXANDER 1929a: 331).

Previous illustrations. ALEXANDER 1929b: Fig. 5. Genitalia. Male hypopygium, Fig. 239.

Remarks. Very similar to M. danielsi Thei.

New records. New South Wales: Cascade (NMNH); Cobcroft Ck, Werrikimbi National Park (GT); Cockerawombeeba Ck, 23 km NW Bellangry, 730 m (GT); Dorrigo (NMNH); Kanangra Walls (GT); Noorinbee (MV); Waterfall, Royal National Park (ANIC); Mt Wilson (NMNH).

Distribution. New South Wales (NEN, SEN), Victoria.

Molophilus (Molophilus) errabunga spec. nov. (Fig. 240)

Description. Colouration: largely greyish yellow; head pale to dark grey, antennae brown; wings and halteres greyish yellow; legs pale to dark greyish yellow.

Dimensions. Wing length, male 3,8-4,4 mm, female 4,1-4,8 mm.

Genitalia. Male hypopygium, Fig. 240.

Remarks. Not similar to any other described species. Diagnostic for *M. errabunga* are the curved, fish-shaped, inner gonostylus and the swallow-tailed parameres.

Material examined. Holotype O, Victoria, Cabbage Tree Creek, 18. 11. 1964, N. Dobrotworsky (ANIC). Paratypes: New South Wales: 1 O, 77 km N of Windsor, 7. 10. 1974, Z. Liepa (ANIC). Victoria: 3 O, same data as holotype (ANIC, GT); 1 O, type locality, 9. 12. 1963, N. Dobrotworsky (ANIC); 2 O, 3 Q, Thurra River, Gippsland, 23. 10. 1966, N. Dobrotworsky (ANIC).

Distribution. New South Wales (SEN), Victoria. Name. Errabunga (Australian Aboriginal word for "fish") refers to the shape of the inner gonostylus.

Molophilus (Molophilus) distinctissimus Alexander (Fig. 241)

Molophilus distinctissimus Alexander, Ann. Mag. nat. Hist (10) 7:156 (1931).

Primary type. Holotype O: Victoria, Ben Cairn, near Millgrove, in beech gully, 2900-3200 ft, 9.
2. 1929, F. E. Wilson (MV); seen; genitalia missing.

Published records. Victoria: Ben Cairn, near Millgrove (ALEXANDER 1931: 157).

Genitalia. Male hypopygium, Fig. 241.

Remarks. Similar to M. perdistinctus ALEX.

New records. Victoria: Beech Forest, Otway Peninsula (NMNH); 5 mi. N Foster (ANIC); Maroondah (ANIC); Marysville-Cumberland Ck (ANIC); Ringwood (NMNH); Sherbrooke (ANIC).

Distribution. Victoria.

Molophilus (Molophilus) perdistinctus ALEX-ANDER (Fig. 242)

Molophilus perdistinctus Alexander, Ann. Mag. nat. Hist. (9) 19: 186 (1927).

Primary type. Holotype of: Tasmania, Cradle Mt, 27. 1. 1923, A. Tonnoir (ANIC); seen. Published records. Tasmania: Cradle Mt (ALEXANDER 1927b: 187).

Genitalia. Male hypopygium, Fig. 242.

Remarks. Similar to M. distinctissimus ALEX. New records. Tasmania: Cradle Valley (ANIC); National Park (NMNH); Mt Wellington (NMNH).

Distribution. Tasmania.

Molophilus (Molophilus) duckhousei spec. nov. (Fig. 243)

Description (O). Colouration: largely dark greyish brown; head dark brownish grey, antennae yellowish to greyish brown; wings and halteres yellowish to pale brownish grey; coxae and trochanters greyish yellow, remainder of legs dark greyish brown.

Dimensions. Wing length 3,0—3,1 mm.

Genitalia. Hypopygium, Fig. 243.

Remarks. Most similar to M. plumbeiceps ALEX. Diagnostic for M. duckhousei is the simple, truncate, inner gonostylus.

Material examined. Holotype of: Victoria, Otway Ranges, Maits Rest, May 1960, D. Duckhouse (MV). Paratype: Victoria: 1 of, Beech Forest, Otway Peninsula, 11-19. 1. 1932, Wilson (NMNH).

Distribution. Victoria.

Name. This species is dedicated to Dr D. Duckhouse who accumulated a large collection of Australian tipulids for the Museum of Victoria.

Molophilus (Molophilus) plumbeiceps ALEX-ANDER (Fig. 244)

Molophilus plumbeiceps Alexander, Ann. Mag. nat. Hist. (9) 19: 30 (1927).

Primary type. Holotype of: Victoria, Sassafras, Dandenong Range, 20. 10. 1922, A. Tonnoir (ANIC); seen.

Published records. Victoria: Sassafras, Dandenong Range (ALEXANDER 1927a: 30). Genitalia. Male hypopygium, Fig. 244.

Remarks. Most similar to *M. duckhousei* sp. n. New records. Victoria: Belgrave (NMNH); Ben Cairn, near Millgrove (NMNH); Cement Ck (ANIC); Cumberland Ck (ANIC); Millgrove (NMNH); Mt Baw Baw, 3600 ft (ANIC); Mt Dom Dom (ANIC); Sherbrooke (ANIC). Distribution. Victoria.

Molophilus (Molophilus) mawiliri spec. nov. (Fig. 245)

Description (O). Colouration: largely greyish brown; head and antennae brownish grey; antennae exceptionally long; wings and halteres yellowish to pale greyish brown; legs yellowish to greyish brown.

Dimensions. Wing length 4,8 mm.

Genitalia. Hypopygium, Fig. 245.

Remarks. Similar to *M. parviserratus* ALEX. Diagnostic for *M. mawiliri* are the three-pointed inner gonostylus and the widely forked, toothed parameres.

Material examined. Holotype of: Tasmania, Mt Wellington, 12. 2. 1963, D. H. Colless (ANIC). Distribution. Tasmania.

Name. Mawiliri (Australian Aboriginal word for "teeth") refers to the denticulate parameres.

Molophilus (Molophilus) parviserratus Alex-ANDER (Fig. 246)

Molophilus parviserratus Alexander, Proc. Linn. Soc. N. S. W. 59: 180 (1934).

Primary type. Holotype O: Tasmania, National Park, 11-15. 1. 1933, F. E. Wilson (MV); seen. Published records. Tasmania: National Park; Mt Wellington (both ALEXANDER 1934: 180).

Previous illustrations. ALEXANDER 1934: Fig. 2. Genitalia. Male hypopygium, Fig. 246. Remarks. Very similar to *M. mawiliri* sp. n. New records. Tasmania: Mt Field National Park, Lyrebird Walk, 700 m (GT). Distribution. Tasmania.

Molophilus (Molophilus) inaequidens Alexander

Molophilus inaequidens Alexander, Ann. Mag. nat. Hist. (9) 20: 370 (1927).

Primary type. Holotype O: New South Wales, Sydney, 2. 9. 1923, E. W. Ferguson (ANIC); seen; genitalia missing.

Published records. New South Wales: Sydney (ALEXANDER 1927d: 371).

Genitalia. Male hypopygium brownish yellow. Apical spine of gonocoxite short and moderately stout, heavily blackened. Outer gonostylus slender, the two arms very unequal, the outer more than twice the length of the inner, sinuous to the acute point; inner arm stout, straight, both arms blackened. Inner gonostylus a short straight flattened blade, the apex bifid, the two teeth straight but very unequal, the outer much larger, besides these two primary teeth, there are a few microscopic spines on the blackened distal third; the inner gonostylus is distinctly shorter than the outer gonostylus. Aedeagus relatively short, the straight apical portion about as long as the inner gonostylus.

Remarks. Belongs to the *M. plagiatus* group (ALEXANDER 1927d). A clear interpretation and illustration are not possible at the present.

New records. None.

Distribution. New South Wales (SEN).

Molophilus (Molophilus) manjimupensis Theischinger (Fig. 247)

Molophilus (Molophilus) manjimupensis Theischinger, Stapfia 17: 184 (1988).

Primary type. Holotype O: Western Australia, 6 mi. SW of Manjimup, 5. 10. 1970, D. H. Collesss (ANIC); seen.

Published records. Western Australia: 8 mi. N of Bunbury; 1 mi. E of Jewel Cave, Augusta; 3

mi. SW of Karridale; 6 mi. SW of Manjimup; Pimelia, near Pemberton (all THEISCHINGER 1988a: 184).

Previous illustrations. Theischinger 1988a: Fig.23.

Genitalia. Male hypopygium, Fig. 247.

Remarks. Not very similar to any other described species.

New records. Western Australia. Augusta (ANIC); 8 mi. N Mt Burker (ANIC); Stirling Range, Red Gum Pass (ANIC).

Distribution. Western Australia (SWA).

Molophilus (Molophilus) pimelia Theischinger (Fig. 248)

Molophilus (Molophilus) pimelia Theischinger, Stapfia 17: 186 (1988).

Primary type. Holotype O: Western Australia, Pimelia, near Pemberton, 5. 10. 1970, D. H. Colless (ANIC); seen.

Published records. Western Australia: Mt Chudalup, S of Northcliffe; Nornalup National Park; Pimelia, near Pemberton; Porongurup National Park (all Theischinger 1988a: 186). Previous illustrations. Theischinger 1988a: Fig.26.

Genitalia. Male hypopygium, Fig. 248.

Remarks. Not similar to any other described species.

New records. Western Australia: Northcliffe (ANIC).

Distribution. Western Australia (SWA).

Molophilus (Molophilus) macalpinei Theischinger (Fig. 249)

Molophilus (Molophilus) macalpinei Theischinger, Stapfia 17: 183 (1988).

Primary type. Holotype O: Queensland, 3 km NE of Mt Webb, 15°03'S/145°09'E, 2. 10. 1980, malaise trap, D. H. Colless (ANIC); seen. Published records. Queensland: Annam River, 3 km W by S of Black Mt; 3,5 km SW by S of Mt Baird, Claudie River, near Mt Lomond; 1 km SE of Mt Cook; Mt Cook National Park; Moses Ck, 4 km N by E of Mt Finnigan; 3 km ENE of Mt Tozer; 3 km NE of Mt Webb (all

THEISCHINGER 1988a: 183).

Previous illustrations. Theischinger 1988a: Fig.22.

Genitalia. Male hypopygium, Fig. 249.

Remarks. Not very similar to any other described species.

New records. None.

Distribution. Queensland (CY).

Molophilus (Molophilus) poecilonota Alex-Ander (Fig. 250)

Molophilus poecilonota Alexander, Ann. Mag. nat. Hist. (9) 13: 501 (1924).

Primary type. Holotype O: New South Wales, Rous, Richmond River, 23. 8. 1923, V. J. Robinson (NMNH); seen.

Published records. New South Wales: Rous, Richmond River (ALEXANDER 1924: 502).

Genitalia. Male hypopygium, Fig. 250.

Remarks. Not very similar to any other described species.

New records. Queensland: Maleny, 2000 ft (ANIC). New South Wales: Brooklana, eastern Dorrigo, 2000-3000 ft (NMNH); Gibraltar Range (AM).

Distribution. Queensland (SEQ), New South Wales (NEN).

Molophilus (Molophilus) titania Alexander (Fig. 251)

Molophilus titania Alexander, Ann. Mag. nat Hist. (10) 5: 372 (1930).

Primary type. Holotype of: Victoria, Ben Cairn, near Millgrove, in beech gully, 2900-3000 ft, 9. 2. 1929, F. E. Wilson (MV); seen.

Published records. Victoria: Ben Cairn, near Millgrove (ALEXANDER 1930: 373).

Genitalia. Male hypopygium, Fig. 251.

Remarks. Not similar to any other described species.

New records. Victoria: Bellel Ck, near Marysville (GT); Bulga National Park, West Gippsland (MV); Millgrove (ANIC, NMNH); Sherbrooke (ANIC).

Distribution. Victoria.

Molophilus (Molophilus) translucens Skuse (Fig. 252)

Molophilus translucens SKUSE, Proc. Linn. Soc. N. S. W. 4: 811 (1890).

Molophilus bipectinatus Alexander, Ann. Mag. nat. Hist. (9) 19: 34 (1927).

Molophilus translucens Skuse; Alexander, Proc. Linn. Soc. N. S. W. 54:140 (1929).

Primary types. Lectotype of of M. translucens Skuse: New South Wales, Lawson, Blue Mts, Masters (ANIC); seen. Holotype of of M. bipectinatus Alexander: Victoria, Sassafras, Dandenong Range, 19. 10. 1922, A. Tonnoir (ANIC); seen.

Published records. New South Wales: Gosford; Hogan's Brush, Narara Ck; Lawson, Blue Mts (all Skuse 1890: 811). Victoria: Sassafras, Dandenong Range (Alexander 1927a: 35). Tasmania: Eaglehawk Neck; Fern Tree, Mt Wellington (both Alexander 1927a: 35).

Previous illustrations. ALEXANDER 1929b: Fig. 4. Genitalia. Male hypopygium, Fig. 252.

Remarks. Not similar to any other described species.

New records. Queensland:Twin Falls, E of Warwick (MV). New South Wales: Macquarie Pass (GT); Megalong Valley (NMNH); northeastern New South Wales (MV); Mt Victoria (NMNH). Victoria: Buckland's, Gippsland (ANIC); Sherbrooke (ANIC).

Distribution. Queensland (SEQ), New South Wales (NEN, SEN), Victoria, Tasmania.

Molophilus (Molophilus) uniguttatus Alex-Ander (Fig. 253)

Molophilus uniguttatus Alexander, Ann. Mag. nat. Hist. (9) 19: 37 (1927).

Primary type. Holotype of: Tasmania, Mt Farrel, 9. 2. 1923, A. Tonnoir (ANIC); seen.

Published records. Tasmania: Mt Farrel (ALEXANDER 1927a: 38).

Genitalia. Male hypopygium, Fig. 253.

Remarks. Not very similar to any other described species.

New records. Tasmania: Florentine River, 15 mi. W of Maydena (MV);7 mi. W of Maydena (ANIC); 10 mi. E of Strahan (ANIC).

Distribution. Tasmania.

Molophilus (Molophilus) walpole Theischinger (Fig. 254)

Molophilus (Molophilus) walpole Theischinger, Stapfia 17: 188 (1988).

Primary type. Holotype O: Western Australia, 24 mi. NW of Walpole, 7. 10. 1970, D. H. Colless (ANIC); seen.

Published records. Western Australia: 24 mi. NW of Walpole (Theischinger 1988a: 188). Previous illustrations. Theischinger 1988a: Fig. 29.

Genitalia. Male hypopygium, Fig. 254.

Remarks. Not similar to any other described species.

New records. Western Australia: Augusta (ANIC); Gingin (ANIC); Mandijong (ANIC); Nunup (ANIC); Yarrahdale (ANIC). Distribution. Western Australia (SWA).

Molophilus (Molophilus) erricha spec. nov. (Fig. 255)

Description (O) Colouration: largely pale brownish yellow, head pale greyish yellow, antennae greyish brown; wings and halteres pale greyish yellow; legs yellowish grey.

Dimensions. Wing length 4,5-4,6 mm.

Genitalia. Hypopygium, Fig. 255.

Remarks. Not very similar to any other described species. Diagnostic for *M. erricha* is the armshaped inner gonostylus.

Material examined. Holotype of: Victoria, Hordern Vale, 10. 3. 1965, N. Dobrotworsky (ANIC). Paratype: Victoria: 1 of, same data as holotype (GT).

Distribution. Victoria.

Name. Erricha (Australian Aboriginal word for "arm") refers to the arm-shaped inner gonostylus.

Molophilus (Molophilus) karaka spec. nov. (Fig. 256)

Description (O). Colouration: largely pale greyish brown; head grey, antennae yellowish to greyish brown; wings pale yellowish grey,

halteres whitish yellow; coxae and trochanters brownish to greyish yellow, remainder of legs greyish brown.

Dimensions. Wing length 2,5-3,1 mm.

Genitalia. Hypopygium, Fig. 256.

Remarks. Not very similar to any other described species. Diagnostic for *M. karaka* is the legshaped inner gonostylus.

Material examined. Holotype of: New South Wales, Belmore Falls, 23. 1. 1963, D. H. Colless (ANIC). Paratypes: New South Wales: 2 of, same data as holotype (ANIC, GT).

Distribution. New South Wales (SEN).

Name. Karaka (Australian Aboriginal word for "leg") refers to the shape of the inner gonostylus.

Molophilus (Molophilus) kokora spec. nov. (Fig. 257)

Description (O). Colouration: largely yellowish grey to pale reddish brown; head pale greyish brown; wings yellowish to pale brownish grey, halteres dull yellow; legs yellowish to pale reddish brown.

Dimensions. Wing length 2,8-3,0 mm.

Genitalia. Hypopygium, Fig.257.

Remarks. Not very similar to any other described species. Diagnostic for *M. kokora* is the inner gonostylus which ends in a horsehead-shaped hook.

Material examined. Holotype of: Queensland, Mt Glorious, rain forest, 24-28. 2. 1961, L. and M. Gressitt (ANIC). Paratypes: Queensland: 2 of, same data as holotype (BPBM, GT).

Distribution. Queensland (SEQ).

Name. Kokora (Australian Aboriginal word for "head") refers to the apex of the inner gonostylus.

Molophilus (Molophilus) kuniekoondie spec. nov. (Fig. 258)

Description (O). Colouration: largely pale yellowish to reddish grey; head somewhat darker, antennae greyish brown; wings and halteres greyish yellow; legs yellowish grey, with two darker rings in distal portion of femur

and with dark apex of tibia, protibia in addition with dark subbasal ring.

Dimensions. Wing length 2,8—3,0 mm.

Genitalia. Hypopygium, Fig. 258.

Remarks. Not very similar to any other described species. Diagnostic for *M. kuniekoondie* is the long bifid inner gonostylus which resembles the claws of a crayfish.

Material examined. Holotype O: Queensland, Tulley Falls, light trap, 10. 3. 1956, J. L. Gressitt (ANIC). Paratype: Queensland: 1 O, Longland's Gap, Evelyn Tableland, 350 m, light trap, 10. 3. 1956, J. L. Gressitt (BPBM). Distribution. Queensland (NEQ).

Name. Kuniekoondie (Australian Aboriginal word for "crayfish") refers to the shape of the inner gonostylus.

Molophilus (Molophilus) ulbracullima spec. nov. (Fig. 259)

Description (O). Colouration: largely pale yellowish brown; head greyish brown, antennae yellowish to brownish grey; wings and halteres greyish yellow; legs yellowish grey, with slight indication of two darker rings in distal portion of femora and dark apex of tibiae.

Dimensions. Wing length 2,7-3,2 mm.

Genitalia. Hypopygium, Fig. 259.

Remarks. Not very similar to any other described species. Diagnostic for *M. ulbracullima* are the divergent apical spurs of the inner gonostylus. Material examined. Holotype O: Queensland, Tulley Falls, 10. 3. 1956, light trap, J. L. Gressitt (ANIC). Paratypes: Queensland: 4 O, same data as holotype (BPBM, GT); 2 O, Herberton, Evelyn Tableland, 300 m, 11. 3. 1956, light trap, J. L. Gressitt (BPBM); 2 O, Sof Ravenshoe, Evelyn Tableland, 350 m, 10. 3. 1956, light trap, J. L. Gressitt (BPBM); 1 O, Longlands's Gap, Evelyn Tableland, 350 m, 10. 3. 1956, light trap, J. L. Gressitt (BPBM); 1 O, Paluma, 900 m, 9-14. 1. 1989, malaise trap, H. and A. Howden (GT).

Distribution. Queensland (NEQ).

Name. Ulbracullima (Australian Aboriginal word for "claw") refers to the shape of the inner gonostylus.

Molophilus (Molophilus) pengana spec. nov. (Fig. 260)

Description. Colouration: largely yellowish to greyish brown; head grey, antennae yellowish grey; wings and halteres pale greyish yellow; legs greyish yellow to greyish brown.

Dimensions. Wing length, male 3,3-3,9 mm, female 3,4-4,2 mm.

Genitalia. Male hypopygium, Fig. 260.

Remarks. Not very similar to any other described species. Diagnostic for *M. pengana* is the mesally directed inner gonostylus which resembles the claws of a hawk.

Material examined. Holotype O: New South Wales, Mooraback, Werrikimbe, National Park, 980 m, 16. 12. 1986, G. Theischinger (ANIC). Paratypes: Queensland: 1 of, Fraser Island, Woongoolbver Creek, 19. 12. 1979, at light, K. J. and C. L. Lambkin (GT). New South Wales: 1 O, Bruxner Park, Coffs Harbour, 1. 11. 1965, M. S. Upton (ANIC); 1 of, Cobcroft Creek, Werrikimbe National Park, 1110 m, 6. 12. 1986, G. Theischinger (GT); 3 O, 10 Q, Cockerawombeeba Creek, 23 km WNW Bellangry, 730 m, 8. 12. 1986, G. Theischinger (GT); 8 O, 11 Q, same data as holotype (GT); 1 O, Narooma Aug. 1965, D. Duckhouse (MV); 3 O, 1 O, Wilson River Reserve, 15 km NW Bellangry, 244 m, 7. 12. 1986, G. Theischinger (GT). Victoria: 1 O, Toorloo Arm, 17. 12. 1964, N. Dobrotworsky (ANIC).

Distribution. Queensland (SEQ), New South Wales (NEN, SEN), Victoria.

Name. Pengana (Australian Aboriginal word for "hawk") refers to the claw-shaped inner gonostylus.

Molophilus (Molophilus) metpadinga spec. nov. (Fig. 261)

Description (O). Colouration: largely pale greyish to reddish brown; head somewhat darker, antennae brownish grey; wings and halteres pale greyish yellow, coxae and trochanters are the only leg segments left.

Dimensions. Wing length 3,3 mm.

Genitalia. Hypopygium, Fig. 261.

Remarks. Not similar to any other described species. Diagnostic for *M. metpadinga* is the three-pointed, club-shaped inner gonostylus. Material examined. Holotype O: Queensland, S of Ravenshoe, Evelyn Tableland, 350 m, light trap, 10. 3. 1956, J. L. Gressitt (ANIC). Distribution. Queensland (NEQ).

Name. Metpadinga (Australian Aboriginal word for "club") refers to the shape of the inner gonostylus.

Onychomolophilus subgen. nov. (Fig. 19)

Molophilus gracilis group, M. ruficollis subgroup, sensu ALEXANDER (1927a, 1929b), in part.

Type species: Molophilus gidya sp. n.

Definition. Male hypopygium with the posterior margin of tergite 9 not strongly sclerotized or armed. Gonocoxite with dorsal lobe well developed, rather wide but without a dorsal appendage, mesal lobe claw-shaped and separated from well-developed rounded ventral lobe by a U-shaped notch; mesodorsal apodeme of gonocoxite not reaching base of tergite 9.

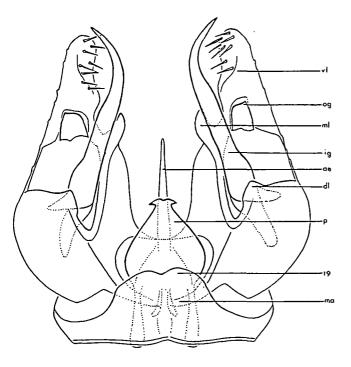


Fig. 19. Molophilus (Onychomolophilus) piggibilla sp. n., male hypopygium, dorsal aspect. Abbreviations: ae = aedeagus;dl = dorsal lobe of gonocoxite; ml = mesal lobe of gonocoxite;og = outer gonostylus;p = parameres; t9 = tergite 9;vl = ventral lobe of gonocoxite.

Outer gonostylus greatly reduced, very short, and originating far from base of gonocoxite. Parameres fused.

Remarks. The strongly reduced outer gonostylus and the strange U-shaped notch between the claw-shaped mesal lobe and the ventral lobe of the gonocoxite are considered apomorphic and diagnostic for *Onychomolophilus*.

Distribution. Australia (south-eastern).

Name. Onychomolophilus (onyx = Greek for ,,claw") refers to the claw-shaped mesal lobe of the gonocoxite.

The Australian species of Molophilus (Onychomolophilus) (in alphabetical order): equisetosus ALEX.

gidya sp. n. piggibilla sp. n.

Molophilus (Onychomolophilus) equisetosus Alexander (Fig. 262)

Molophilus equisetosus Alexander, Proc. Linn. Soc. N. S. W. 59: 186 (1934).

Primary type. Holotype O: New South Wales, Mount Victoria, Blue Mts, 3425 ft, 20-30. 10. 1930, F. E. Wilson (MV); seen; genitalia missing.

Published records. New South Wales: Mt Victoria, Blue Mts, 3425 ft (ALEXANDER 1934: 187).

Previous illustrations. ALEXANDER 1934: Fig. 10. Genitalia. Male hypopygium, Fig. 262.

Remarks. Similar to both *M. piggibilla* sp. n. and *M. gidya* sp. n.

New records. New South Wales: Fitzroy Falls, Blue Mts (ANIC).

Distribution. New South Wales (SEN).

Molophilus (Onychomolophilus) piggibilla spec. nov. (Fig. 263)

Description (O). Colouration: largely dark brownish grey; head dark grey, antennae greyish brown; wings greyish brown, halteres pale greyish brown to dull yellow; legs pale to dark greyish brown.

Dimensions. Wing length 4,5 mm. Genitalia. Hypopygium, Fig. 263.

Remarks. Most similar to *M. equisetosus* ALEX. Diagnostic for *M. piggibilla* are the curved inner and the flat, minute, outer gonostylus. Material examined. Holotype σ : Victoria, Bogong, 24. 1. 1965, N. Dobrotworsky (ANIC). Distribution. Victoria.

Name. Piggibilla (Australian Aboriginal word for "Echidna") refers to the spiny mesal face of the ventral lobe of the gonocoxite.

Molophilus (Onychomolophilus) gidya spec. nov. (Fig. 264)

Description (O). Colouration: largely greyish yellow; head yellowish grey, antennae yellowish brown; wings pale brownish yellow, halteres dull yellow; legs greyish yellow to pale yellowish grey.

Dimensions. Wing length 4,3-4,7 mm. Genitalia. Hypopygium, Fig. 264.

Remarks. Similar to *M. equisetosus* ALEX. Diagnostic for *M. gidya* are the simple spear-shaped inner gonostylus and the tower-shaped parameres.

Material examined. Holotype O: New South Wales, Wentworth Falls, Feb. 1980, G. Theischinger (ANIC). Paratype: New South Wales: 1 O, same data as holotype (GT).

Distribution. New South Wales (SEN).

Name. Gidya (Australian Aboriginal word for "long spear made of acacia timber") refers to the spear-shaped inner gonostylus.

Subgenus Superbomolophilus Theischinger (Fig. 20)

Molophilus gracilis group, M. ruficollis subgroup, sensu ALEXANDER (1927a, 1929b), in part. Superbomolophilus Theischinger, Stapfia 17: 196 (1988); as subgenus of Molophilus Curtis.

Type species: *Molophilus brumby* THEISCHINGER 1988, by original designation.

Definition. Male hypopygium with posterior margin of tergite 9 rather strongly sclerotized or armed. Dorsal and mesal lobe of gonocoxite

moderately well developed, ventral lobe strongly developed; mesodorsal apodeme of gonocoxite not reaching base of tergite 9. Both gonostyli single-branched, originating close together, the much more substantial inner gonostylus almost obscuring the outer gonostylus. Parameres almost completely divided, the two parts drawn out into long slender processes positioned along and connected to the mesal face of gonocoxites. Distribution. Australia (eastern).

The Australian species of *Molophilus* (Superbomolophilus) (in alphabetical order): brumby Thei.

cooloola sp. n. froggatti Skuse gigas Alex. inelegans Alex. kunara sp. n. marriwirra sp. n.

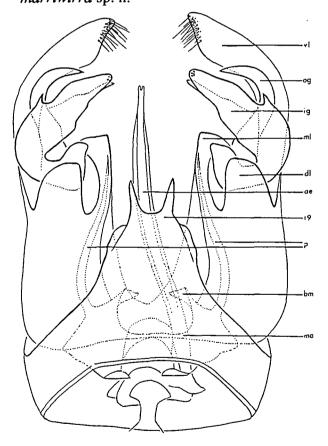


Fig. 20. Molophilus (Superbomolophilus) cooloola sp. n., male hypopygium, dorsal aspect. Abbreviations: ae = aedeagus; bm = base of mesal face of gonocoxite; dl = dorsal lobe of gonocoxite; ig = inner gonostylus; ma = mesodorsal apodeme of gonocoxite; ml = mesal lobe of gonocoxite; og = outer gonostylus; p = parameres; t9 = tergite 9; vl = ventral lobe of gonocoxite.

Molophilus (Superbomolophilus) cooloola spec. nov. (Fig. 265)

Description (O). Colouration: largely greyish to blackish brown; head blackish grey, antennae greyish brown; wings and halteres pale grey; coxae and trochanters yellow; fore leg greyish yellow to brownish grey; midleg greyish yellow with tibia and two basal tarsal segments darkened distally and remaining tarsal segments greyish brown; hind leg largely yellow, tibia with long greyish black apical ring, basitarsus yellow in basal half, brownish black in distal half, second tarsal segment yellow with black apex, remaining tarsal segments black.

Dimensions. Wing length 4,3 mm.

Genitalia. hypopygium, Fig. 265.

Remarks. Somewhat similar to *M. gigas* ALEX. Diagnostic for *M. cooloola* are the double-pointed tergite 9 and the flattened apex of the ventral lobe of the gonocoxite.

Material examined. Holotype of: Queensland, Cooloola National Park, Searys Creek, 18. 5. 1990, G. Theischinger (ANIC).

Distribution. Queensland (SEQ).

Name. Cooloola refers to the type locality; it is to be regarded as an undeclinable noun in apposition to the generic name.

Molophilus (Superbomolophilus) gigas Alex-ANDER (Fig. 266)

Molophilus gigas Alexander, Rec. S. Aust. Mus. 2: 236 (1922).

Primary type. Holotype O: Tasmania, Waratah, A. M. Lea (NMNH); seen.

Published records. Tasmania: Waratah (Alexander 1922: 237).

Genitalia. Male hypopygium, Fig. 266.

Remarks. Somewhat similar to M. cooloola sp.n.

New records. None.

Distribution. Tasmania.

Molophilus (Superbomolophilus) inelegans Alexander

Molophilus inelegans Alexander, Ann. Mag. nat. Hist. (9) 19: 187 (1927).

Primary type. Holotype O: New South Wales, Waterfall, Nov. 1921, A. Tonnoir (ANIC); seen; genitalia missing.

Published records. New South Wales: Waterfall (ALEXANDER 1927b: 188).

Genitalia. Male hypopygium with gonocoxites relatively stout, the base with relatively small setae, the apex rather abruptly narrowed into a pale flattened lobe with more numerous conspicuous setae. Outer gonostylus dusky, a slender rod, the basal half arched into a halfcylinder, the apex gradually narrowed to the subacute tip. Inner gonostylus with the stem strongly curved, the apex dilated into a conspicuous pale flattened blade that bears two spines, a larger one near the base on the lower margin, and a small straight spine placed more distally on the upper margin; disk of the blade with about fifteen delicate setiferous punctures. Parameres very powerful, appearing as slender curved horns, the tips more blackened, acute. Aedeagus exceedingly elongate, slender, arcuated, in a position of rest jutting beyond the other elements of the hypopygium, shortly before its apex a little dilated.

Remarks. Obviously similar to *M. marriwirra* sp. n.

New records. None.

Distribution. New South Wales (SEN).

Molophilus (Superbomolophilus) marriwirra spec. nov. (Fig. 267)

Description (O). Colouration: largely pale greyish brown; head brownish grey, antennae yellowish to greyish brown; wings pale greyish brown, halteres greyish yellow with grey apex; legs pale yellowish to greyish brown.

Dimensions. Wing length 7,8 mm.

Genitalia. Hypopygium, Fig. 267.

Remarks. Obviously similar to *M. inelegans* ALEX. Diagnostic for *M. marriwirra* is the particular position of the spines on the inner gonostylus.

Material examined. Holotype O: New South Wales, McGarr's Creek, Kuringai Chase, 23.9. 1962, D. H. Colless (ANIC).

Distribution. New South Wales (SEN).

Name. Marriwirra (Australian Aboriginal word for "club") refers to the club-shaped ventral lobe of the gonocoxite.

Molophilus (Superbomolophilus) brumby Theischinger (Fig. 268)

Molophilus (Superbomolophilus) brumby Theischinger, Stapfia 17: 197 (1988).

Primary type. Holotype of. Queensland, 15°03'S/145°09'E, 3 km NE of Mt Webb, 2. 10. 1980, malaise trap, D. H. Colless (ANIC); seen.

Published records. Queensland: Moses Ck, 4 km N by E of Mt Finnigan; 3 km NE of Mt Webb (both Theischinger 1988a: 197).

Previous illustrations. Theischinger 1988a: Fig.39.

Genitalia. Male hypopygium, Fig. 268.

Remarks. Not similar to any other described species.

New records. None.

Distribution. Queensland (CY).

Molophilus (Superbomolophilus) froggatti Skuse (Fig. 269)

Molophilus froggatti Skuse, Proc. Linn. Soc. N. S. W. 4:807 (1890).

Molophilus froggatti Skuse; Alexander, Proc. Linn. Soc. N. S. W. 54: 142 (1929).

Molophilus (Superbomolophilus) froggatti Skuse; Theischinger, Stapfia 17: 197 (1988).

Primary type. Holotype Q: New South Wales, Waverley, near Sydney, October, Froggatt (ANIC); seen.

Published records. Queensland: Sunnybank (Theischinger 1988a: 198). New South Wales: Waverley, near Sydney (Skuse 1890: 808); Brooklana, Eastern Dorrigo; Barrington Tops, 5000 ft; Blue Mts; Sydney; Wentworth Falls, Blue Mts; Mt Wilson, Blue Mts (all Alexander 1929b: 142). Victoria: Beaconsfield; Lower Tarwin(both Alexander 1929b:142). Tasmania:

Adventure Bay; Burnie; Cradle Valley; Eaglehawk Neck; Geeveston; Zeehan (all ALEXANDER 1929b: 142).

Previous illustrations. ALEXANDER 1929b: Fig. 8; Theischinger 1988a: Fig. 40.

Genitalia. Male hypopygium, Fig. 269.

Remarks. Not particularly similar to any other described species.

New records. Queensland: North Stradbroke Island near Brisbane (NMNH). New South Wales: Alpine Ck (ANIC); Dorrigo (NMNH); Ebor (NMNH); 8 mi. E Ebor, 4300 ft (ANIC); Fitzroy Falls, 3600 ft (ANIC); Kiandra, 4500 ft (ANIC); 4 mi S of Monga (ANIC); Mt Kaputar (GT); Uloola Ck (GT). Victoria: Branch Ck, Grampians (MV); Bullion (ANIC); Mt Drummer (ANIC); Hospital Ck (ANIC); Lower Tarwin (NMNH); Wilson's Promontory, Tea Tree Swamp (ANIC). Tasmania: Bluff Ck, 12 km S of Marrawah (MV); 11 mi NNE of Bronte (ANIC); Meander River, Doloraine (MV); Scottsdale (NMNH).

Distribution. Queensland (SEQ), New South Wales (NEN, SEN); Victoria, Tasmania.

Molophilus (Superbomolophilus) kunara spec. nov. (Fig. 270)

Description. Colouration: largely greyish brown; head brownish grey, antennae yellowish brown; wings yellowish grey, halteres whitish to yellowish grey; legs brownish yellow to greyish brown, apex of femora and tibiae slightly darkened.

Dimensions. Wing length, male 4,4—5,1 mm, female 4,6—5,7 mm.

Genitalia. Male hypopygium, Fig. 270. Female valves very short, basally enlarged.

Remarks. Not similar to any other described species. Diagnostic for *M. kunara* are the complex inner and the minute outer gonostylus and the denticulate parameres.

Material examined. Holotype of. New South Wales, Malden Bridge, Nepean River, 26. 11. 1986, G. Theischinger (ANIC). Paratypes: New South Wales: 2 of, 4 Q, same data as holotype (ANIC, GT); 1 Q, Carnarvon Gorge, 14. 5. 1990, G. Theischinger (GT).

Distribution. Queensland (SIQ), New South

Wales (SEN).

Name. Kunara (Australian Aboriginal word for "tiger shark") refers to the denticulate parameres.

The Australian species of *Molophilus* with subgeneric placement unknown:

micropteryx ALEX.
subapterogyne ALEX.
(both species known form brachypterous females only).

Molophilus micropteryx Alexander

Molophilus micropteryx Alexander, Ann. Mag. nat. Hist. (9) 20: 367 (1927).

Primary type. Holotype Q: New South Wales, Wentworth Falls, Blue Mts, 2844 ft, 18. 1. 1921, A. Tonnoir (ANIC); seen.

Published records. New South Wales: Wentworth Falls, Blue Mts, 2844 ft (ALEXANDER 1927d: 367).

Original description (Q). Length about 2,8 mm; wing 0,8 mm.

Rostrum and palpi black. Antennae of moderate length, black throughout, provided with conspicuous verticils. Head grey. Thorax entirely dark grey. Halteres pale brown, very small, the heads feebly dilated. Legs relatively short and stout; coxae brownish black; trochanters brown; remainder of legs dark brown. Wings very reduced, if bent backward not extending beyond the second abdominal segment, with a pale brown tinge, the base more yellowish; veins darker brown, stout. Venation distorted, but evident; cell R3 barely sessile; vein A1 ending opposite m-cu; vein A2 short. Abdomen brownish black; basal shield of ovipositor dark, the valves more slender, gently upcurved, the tips acute.

Remarks. Male unknown. Does, according to Alexander (1927d), not agree with the known males of any of the species described by Skuse or himself, and in its general appearance it agrees most closely with *M. furvus* ALEX., which is fully winged in both sexes.

New records. None.

Distribution. New South Wales (SEN).

Molophilus subapterogyne ALEXANDER

Molophilus subapterogyne Alexander, Ann. Mag. nat. Hist. (9) 20: 368 (1927).

Primary type. Holotype Q: Tasmania, Cradle Valley, 3500 ft, 23. 1. 1923, A. Tonnoir (ANIC); seen.

Published records. Tasmania: Cradle Valley (Alexander 1927d: 368).

Original description (Q). Length about 3 mm; wing 1,2 mm.

Rostrum and palpi brownish black. Antennae dark brown. Head dark brown. Mesonotum dark testaceous-brown, somewhat shiny, the pleura a little paler. Halteres small, pale, the knobs very small. Legs relatively short, brownish yellow, the terminal tarsal segments passing into dark brown. Wings subatrophied, dimidiate, the basal three-fifths grey, the distal two-fifths (beyond the cord) dark brown; costal setae relatively few and scattered; a row of similar setae along vein R1 for its entire length; costal fringe ending at the wing-apex, the margin beyond vein R5 entirely naked; veins very indistinct and ill-defined. Abdomen dark brown, the genital segment ochreous, the valves of the ovipositor long but relatively stout, the tergal valves more slender, gently upcurved to the acute tips.

Remarks. Male unknown. According to Alexander (1927d) resembling *M. micropteryx* ALEX. in its subapterous condition.

New records. None.

Distribution, Tasmania.

Doubtful names (nomina dubia) in Australian *Molophilus*:

helmsi Skuse montivagus Skuse notatipennis Skuse

Molophilus helmsi Skuse

Molophilus helmsi Skuse, Proc. Linn. Soc. N. S. W. 4: 805 (1890).

Primary type. Type of. New South Wales, Mount Kosciusko, 5000 ft, Mar., Helms (AM); seen; only badly damaged parts of head, thorax and one wing left.

Published records. New South Wales: Mt Kosciusko, 5000 ft (Skuse 1890: 806).

Original description. Male: expanse of wings 6,34 mm x 1,66 mm; size of body 4,56 mm x 0,90 mm. Female: length of antennae 1,54 mm; expanse of wings 6,85 mm x 1,77 mm; size of body 4,68 mm x 1,01 mm.

Dusky brown, Head, including rostrum, palpi, and antennae black or deep brown; joints of the flagellum fusiform with some long verticillate hairs. Thorax levigate, with two longitudinal rows of golden hairs; humeri tinged with ochreous-yellow. Halteres with a dense pale yellowish sericeous pubescence, the base of stem brown. Abdomen clothed with goldenyellow hairs; male forceps black; ovipositor ochreous, the lower valve brown. Legs entirely dusky or sooty brown. Wings sub-hyaline, the veins yellowish, with dense long hairs covering the cells; the hairs chiefly dusky brown, with some golden patches; an elongate patch of golden hairs on costa immediately beyond the tip of auxiliary vein; that portion of first longitudinal vein before the costal patch, the third longitudinal vein except at its base and towards its extremity, portions of veins in the middle of the wing, and fifth, sixth and seventh longitudinal veins, with golden hairs; marginal cilia dusky brown variegated with golden.

Remarks. According to ALEXANDER (1927c), Dr Ferguson and Dr Mackerras both noted that *M. scaber* ALEX. is very close to *M. helmsi*, but the dististyles (gonostyli) longer and more slender. In spite of that, *Molophilus helmsi* Skuse is regarded as a nomen dubium as an interpretation of the species seems impossible. New records, None.

Distribution. New South Wales (SEN).

Molophilus montivagus Skuse

Molophilus montivagus SKUSE, Proc. Linn. Soc. N. S. W. 4: 808 (1890).

Primary type. Holotype Q: New South Wales, Jindabyne, 3000 ft, Mar., Helms (AM); seen. Published records. New South Wales: Jindabyne, 3000 ft (Skuse 1890: 808).

Original description (Q). Length of antennae 1,13 mm, expanse of wings 5,58 mm x 1,66 mm; size of body 4,56 mm x 0,88 mm.

Head greyish-brown, with a minute yellowish pubescence; rostrum, palpi and antennae black or dark brown; flagellar joints elliptical, with short verticils. Collare ochreous. Thorax light ochreous-brown, almost covered by a very broad brownish median stripe; the whole pruinose with greyish; humeri slightly ochreous yellow; pleura dusky brown. Halteres very pale yellow, with a sericeous pubescence. Abdomen dusky brown, opaque, clothed with yellow hairs, the segments with an indistinct narrow border of dull ochreous-brown posteriorly; ovipositor testaceous. Coxae dull testaceous. Remainder of joints uniformly dusky brown. Wings subhyaline; veins ochreous-yellow, sparingly beset with short grey hairs, imparting to the wings a light greyish appearance.

Remarks. Male unknown. *Molophilus* montivagus SKUSE is regarded in this paper as a nomen dubium as an interpretation of the species seems impossible.

New records. None.

Distribution. New South Wales (SEN).

Molophilus notatipennis Skuse

Molophilus notatipennis Skuse, Proc. Linn. Soc. N. S. W. 4: 806 (1890).

Primary type. Holotype Q: New South Wales, Gosford, flying about a tree trunk, Aug., Skuse (ANIC); seen.

Published records. New South Wales: Gosford (Skuse 1890: 807).

Original description (Q). Length of antennae 1,27 mm; expanse of wings 5,58 mm x 1,27 mm; size of body 3,55 mm x 0,62 mm.

Head, including rostrum, palpi, and antennae, dark brown; flagellar joints subcylindrical, rather larger toward their base, verticillate-pilose. Thorax reddish-brown, levigate, with two sparse longitudinal rows of brown hairs, humeri, base of wings and centre of transverse suture ochreyellow. Halteres pale yellow, with a sericeous pubescence. Abdomen dusky or deep umber-

brown, clothed with yellow hairs; ovipositor brownish-ochreous, valves very short. Coxae ochreous. Remaining joints dusky brown, the knees pale yellow or whitish. Wings sub-hyaline (when denuded); the veins pale brownish, with dense long hairs covering the cells; hairs brown, more dense and forming five blackish clouds as follows: first at the bases of the submarginal cells, second at the basal portion of posterior branch of fourth longitudinal fork, another at the middle of third longitudinal vein, another near base of fourth and fifth longitudinal veins, and the last beyond middle of seventh longitudinal vein.

Remarks. Male unknown. *Molophilus* notatipennis SKUSE is regarded in this paper as a nomen dubium as an interpretation of the species seems impossible.

New records. None.

Distribution. New South Wales (SEN).

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Species Index

This alphabetical list includes all names of the species group (valid species, synonyms, homonyms) in Australian *Molophilus*.

Reference to the next higher ranking taxon (subgenus or species group) or artificial unit as used in this paper is given by the following abbreviations:

Aus Austromolophilus Thei., 8, 10 Dip Diplomolophilus sg. n., 8, 24 Lyr Lyriomolophilus Thei., 8, 25 Mfl Molophilus (Molophilus) flavoannulatus

group, 9, 29 Mgr Molophilus (Molophilus) gracilis group,

9, 30
Mpl Molophilus (Molophilus) plagiatus group,

Ony Onychomolophilus sg. n., 9, 78 Sup Superbomolophilus Thei., 9, 79 ?Mo subgenus unknown

??? nomen dubium

Reference is also given to the figure numbers in this paper (italics) and to the page numbers of the text (bold).

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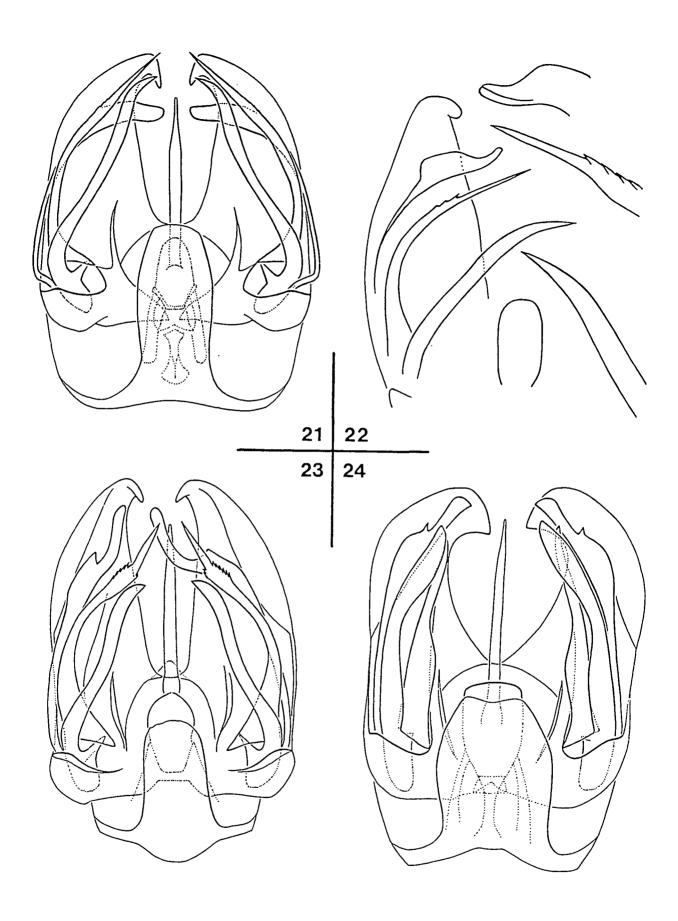
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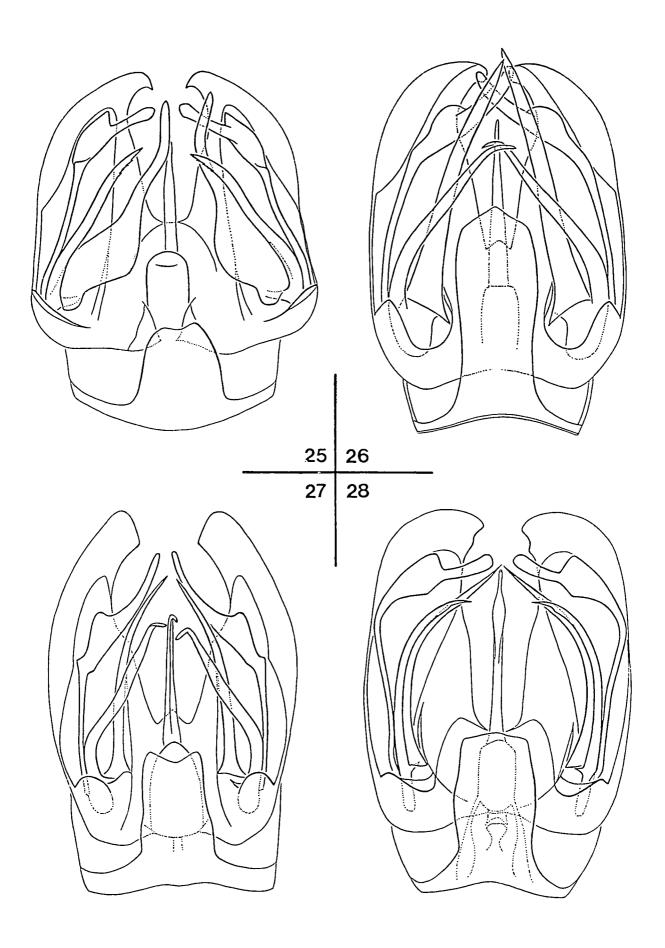
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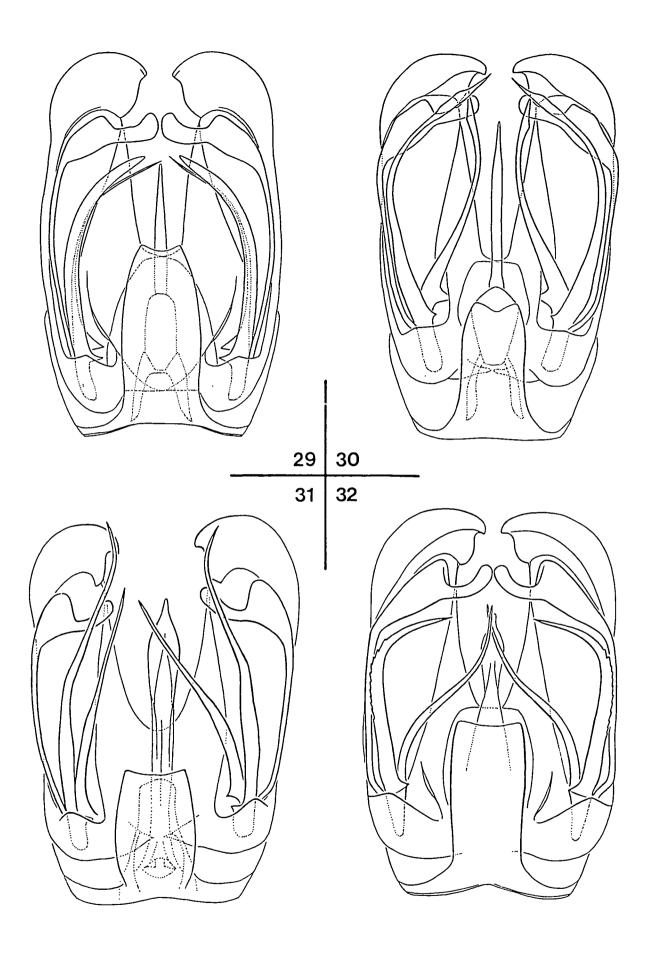
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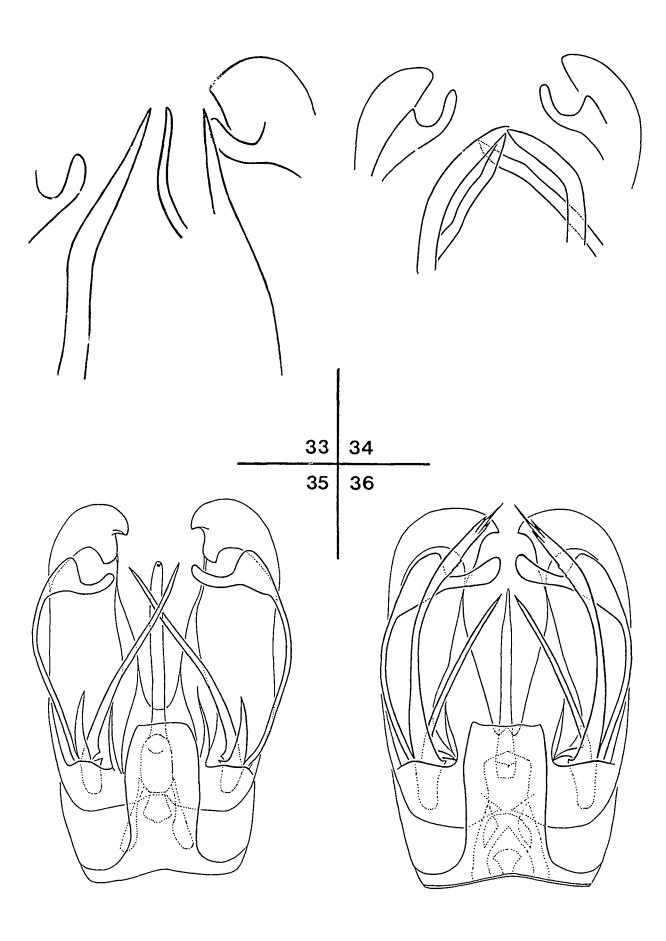
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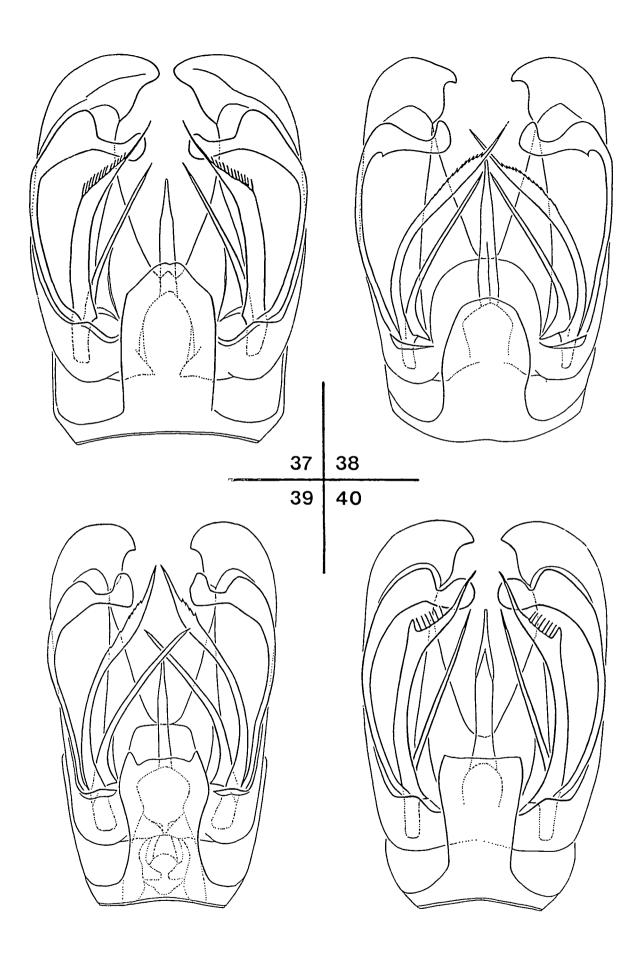
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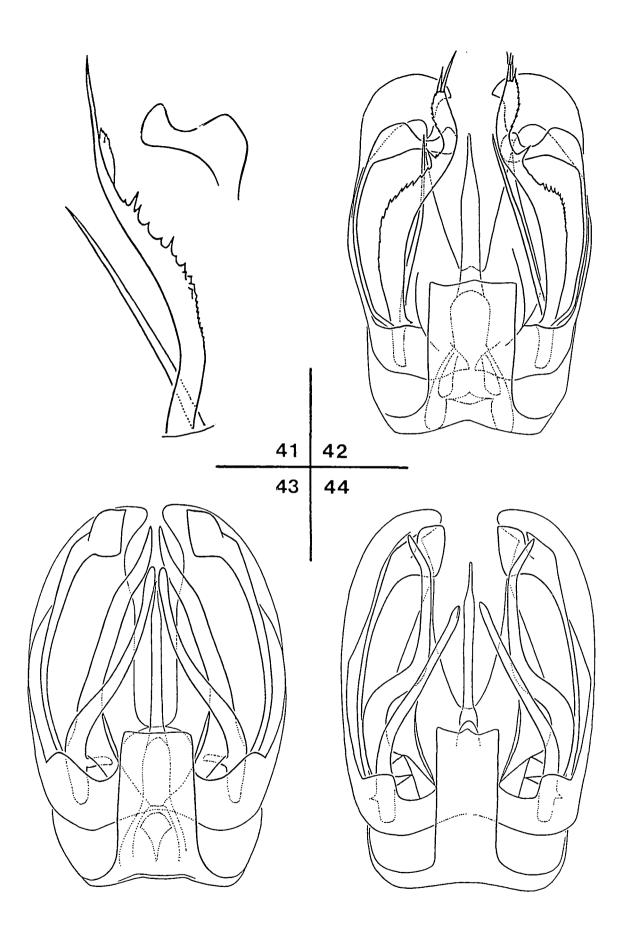
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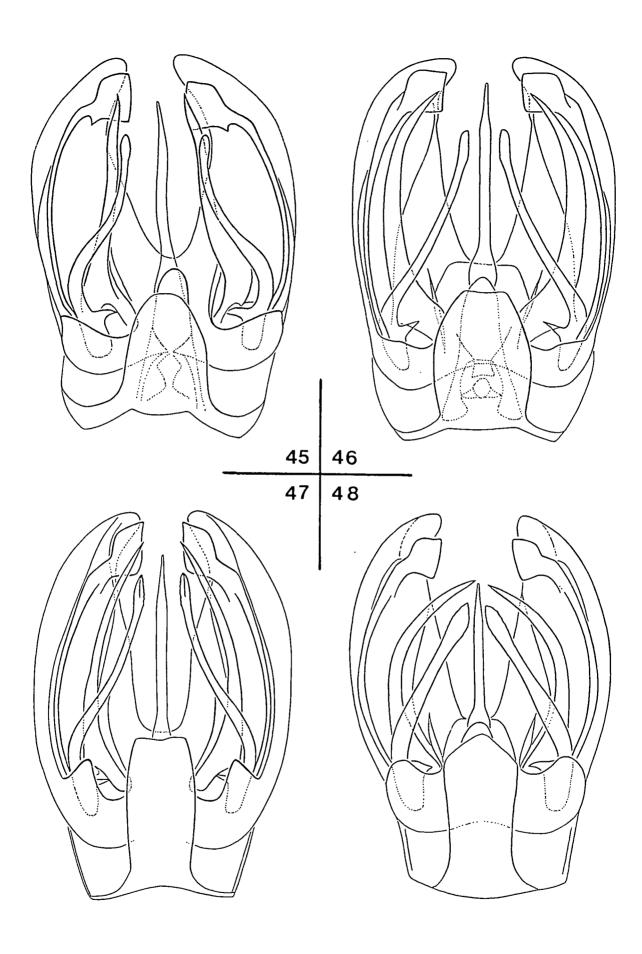
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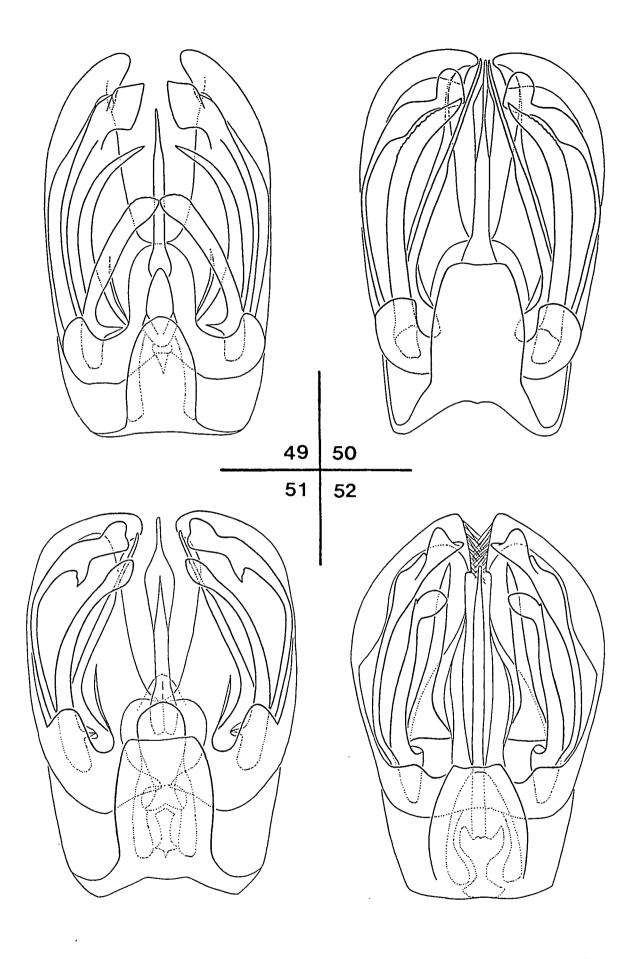
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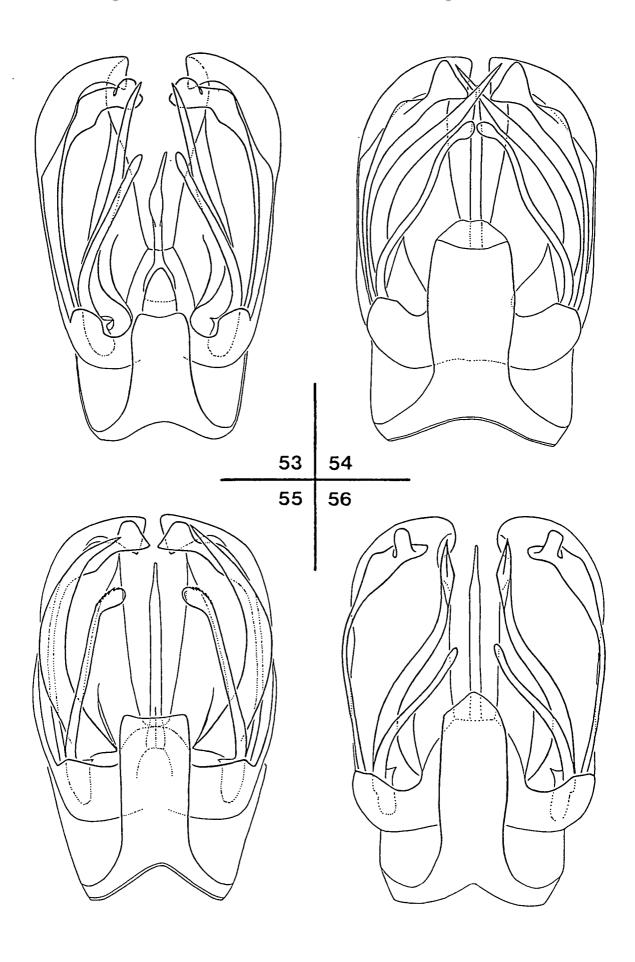
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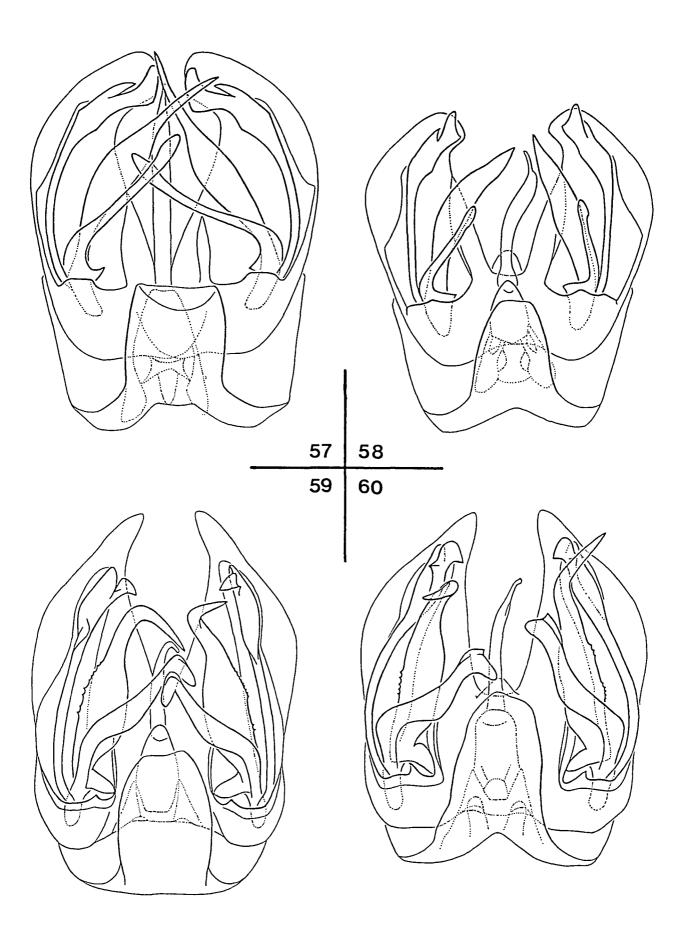
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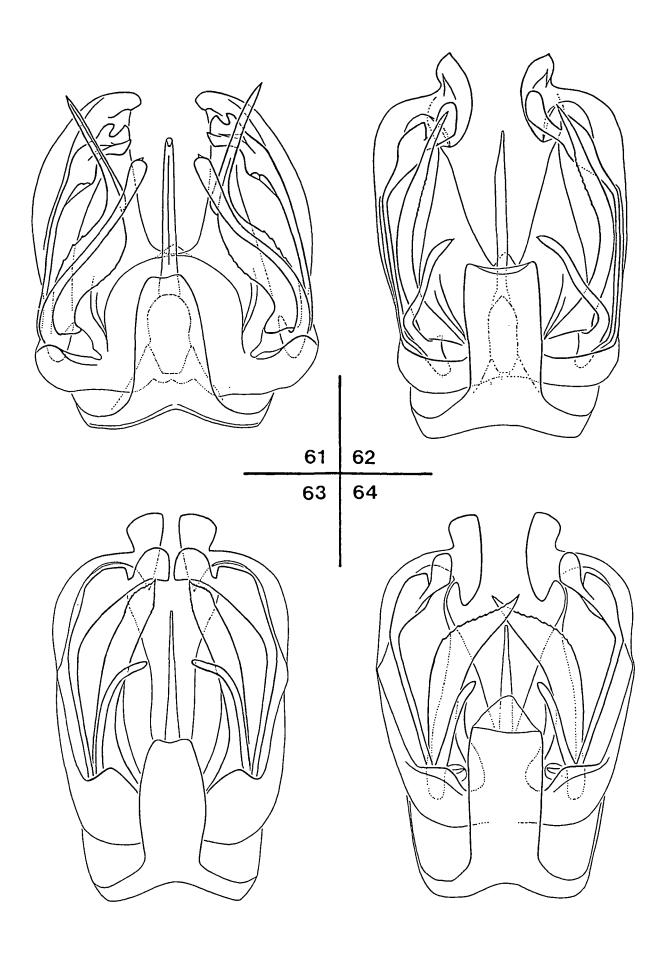
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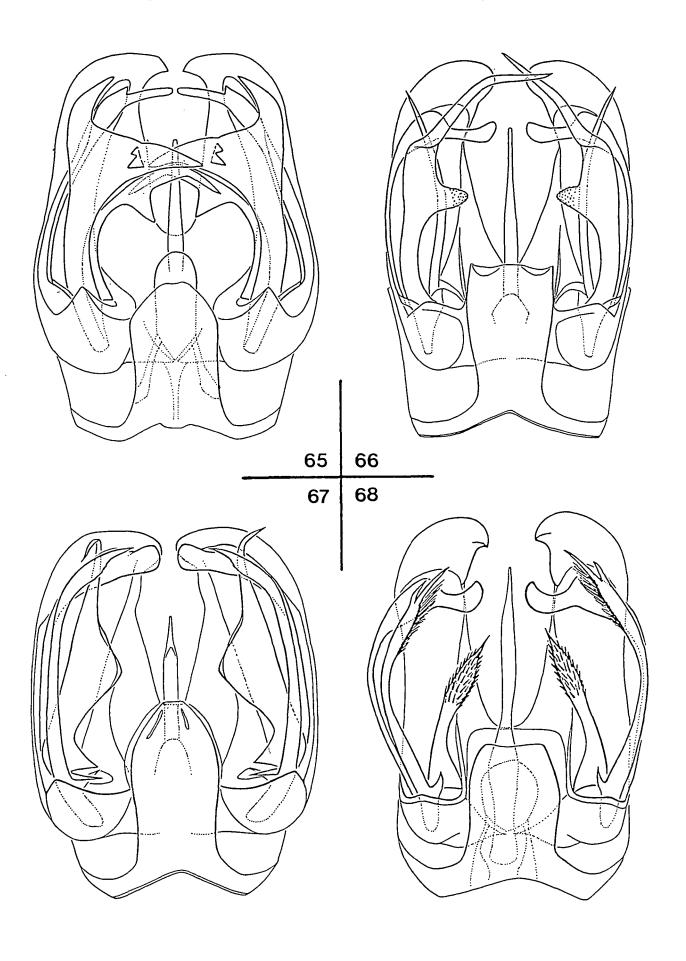
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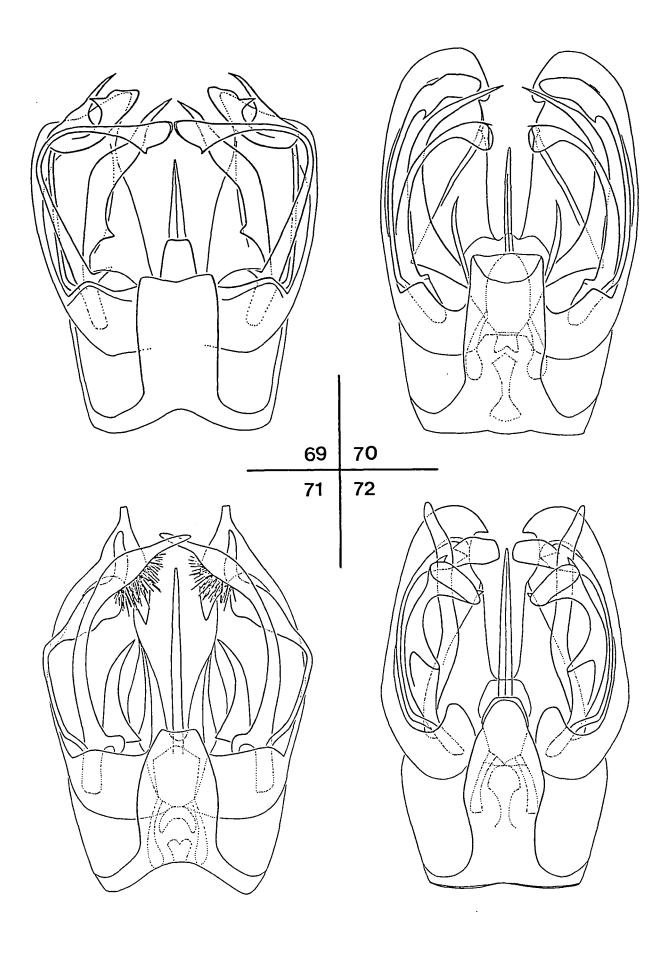
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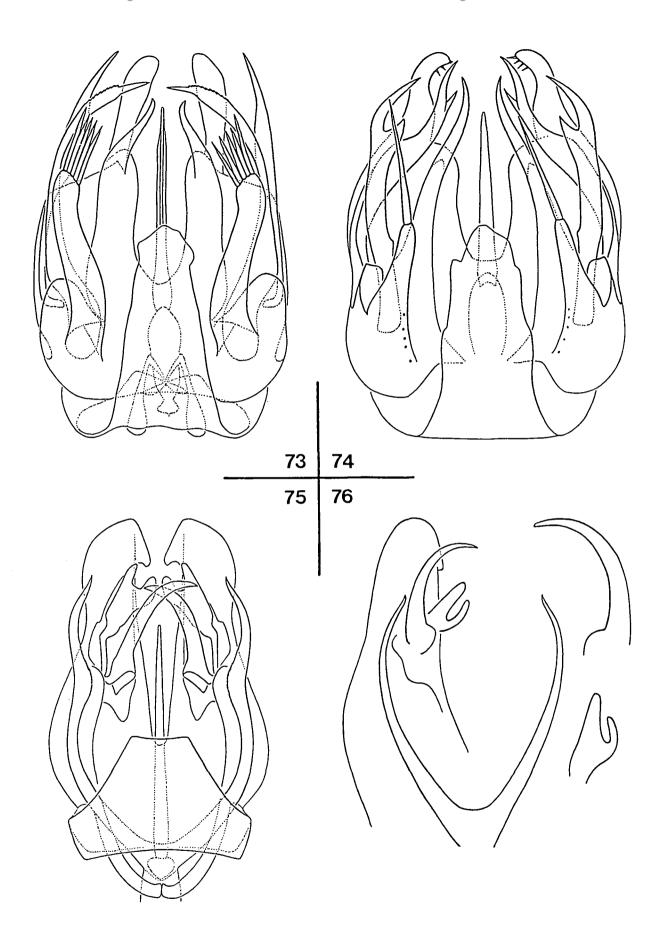
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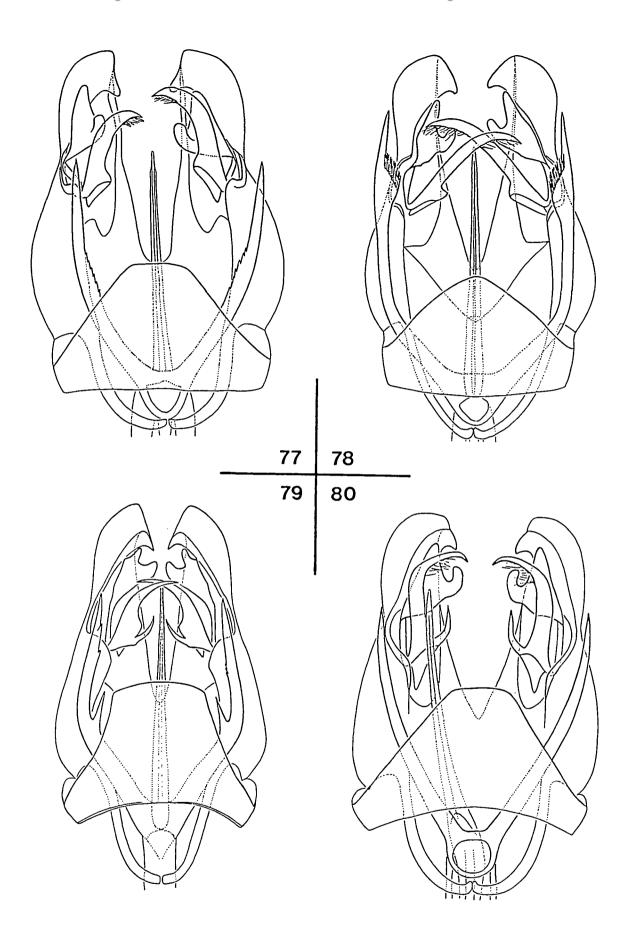
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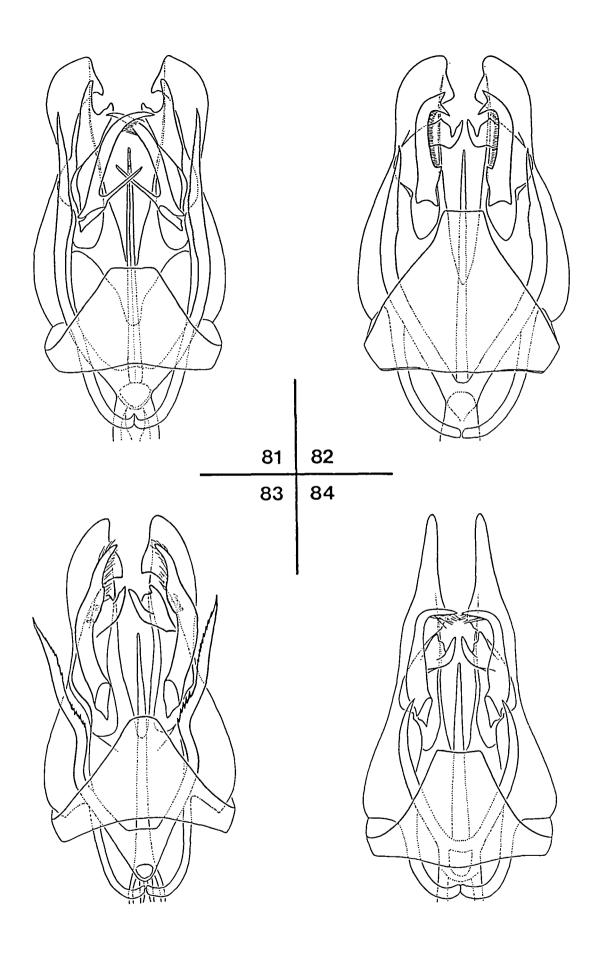
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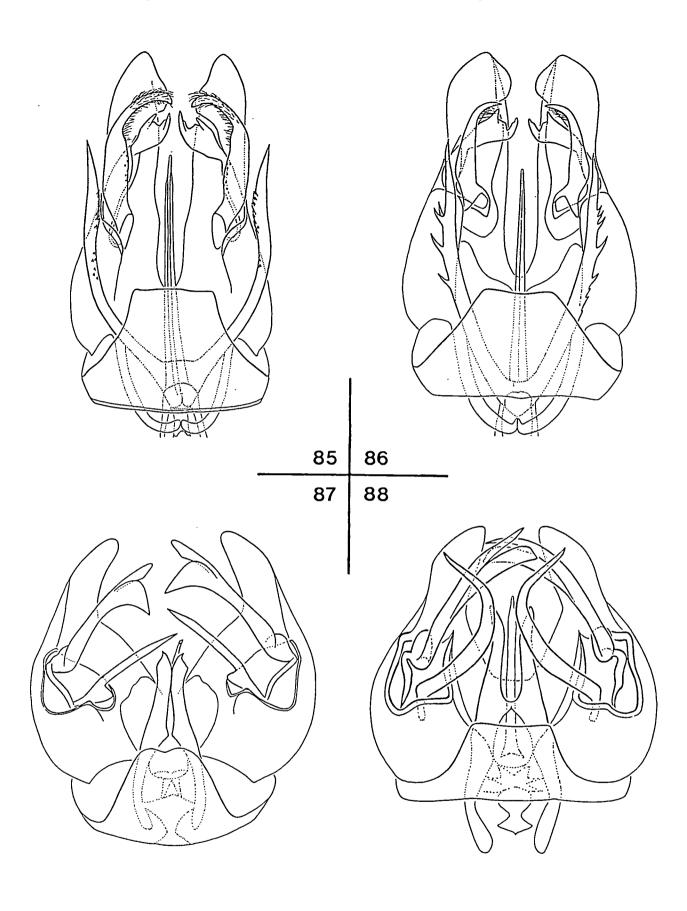
Figs 73, 74. Molophilus (Diplomolophilus): 73, mongana sp. n.; 74, yumbera sp. n. Figs 75,76. Molophilus (Lyriomolophilus): 75, gingera Thel.; 76, neolyratus Alex. (parts, from holotype slide).



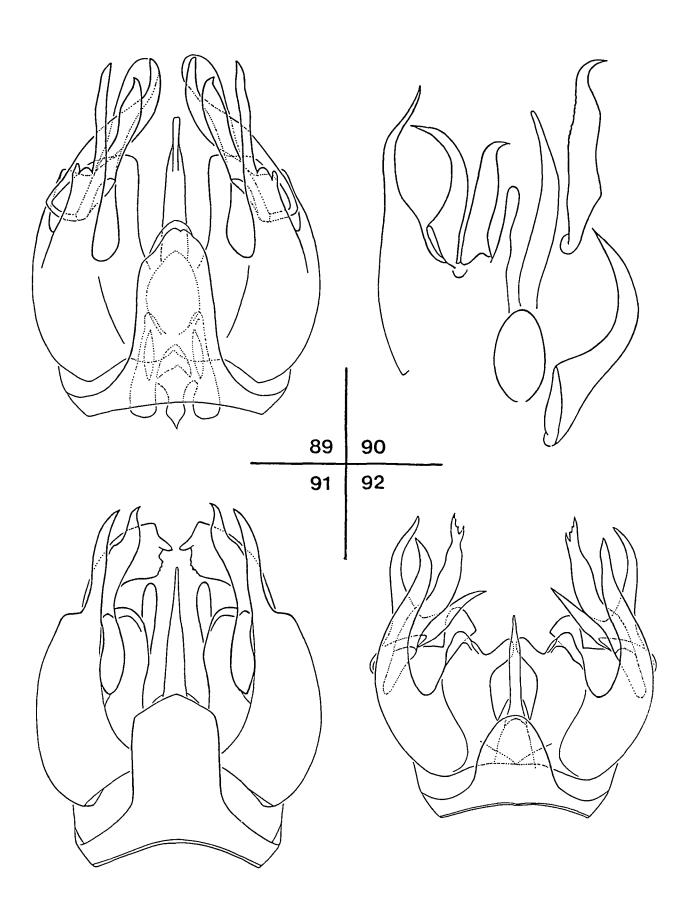
 $Figs \, 77-80. \textit{Molophilus} (Lyriomolophilus): 77, \textit{sublyratus} \, \text{Alex.}; 78, \textit{weringerong} \, \text{sp. n.}; 79, \textit{barina} \, \text{Thei.}; 80, \textit{bickelisp.n.}$



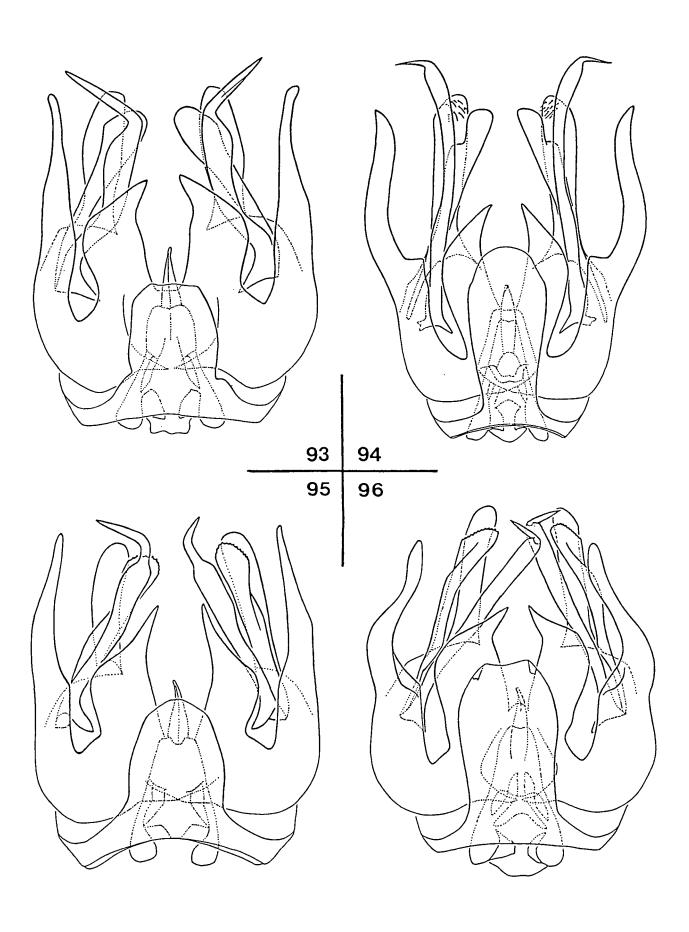
 $Figs\,81-84.\,\textit{Molophilus}\,(\textit{Lyriomolophilus}):\,81, \textit{keira}\,\text{Thei.};\,82, \textit{buckenbowra}\,\text{Thei.};\,83, \textit{alexanderorum}\,\text{sp. n.};\,84, \textit{collessi}\,\text{Thei.}$



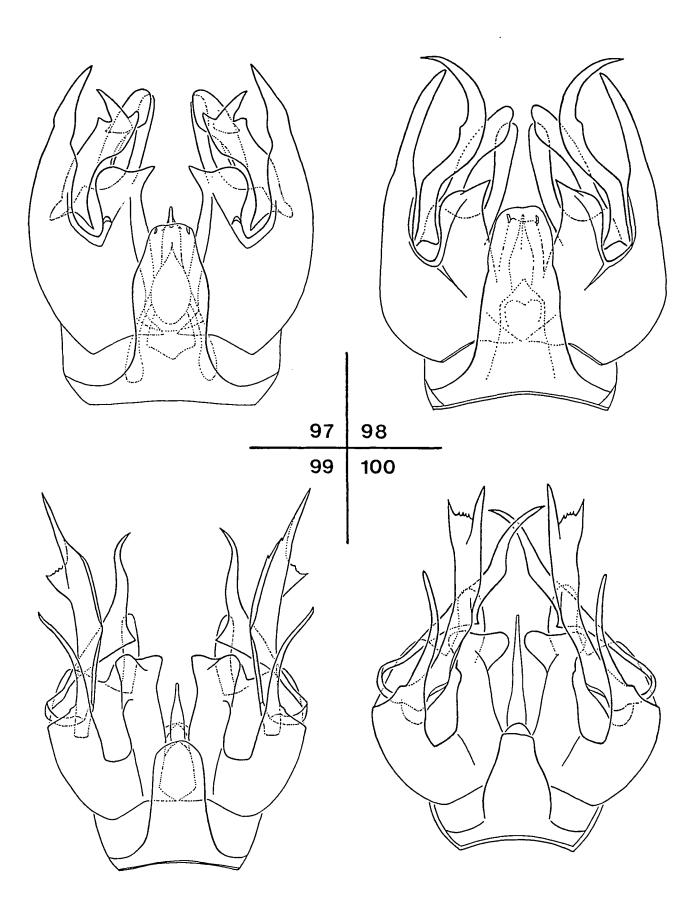
Figs 85, 86. Molophilus (Lyriomolophilus): 85, leonardi sp. n.; 86, neboissi Thei. Figs 87, 88. Molophilus (Molophilus): 87, flavoannulatus Alex.; 88, mimicus Alex.



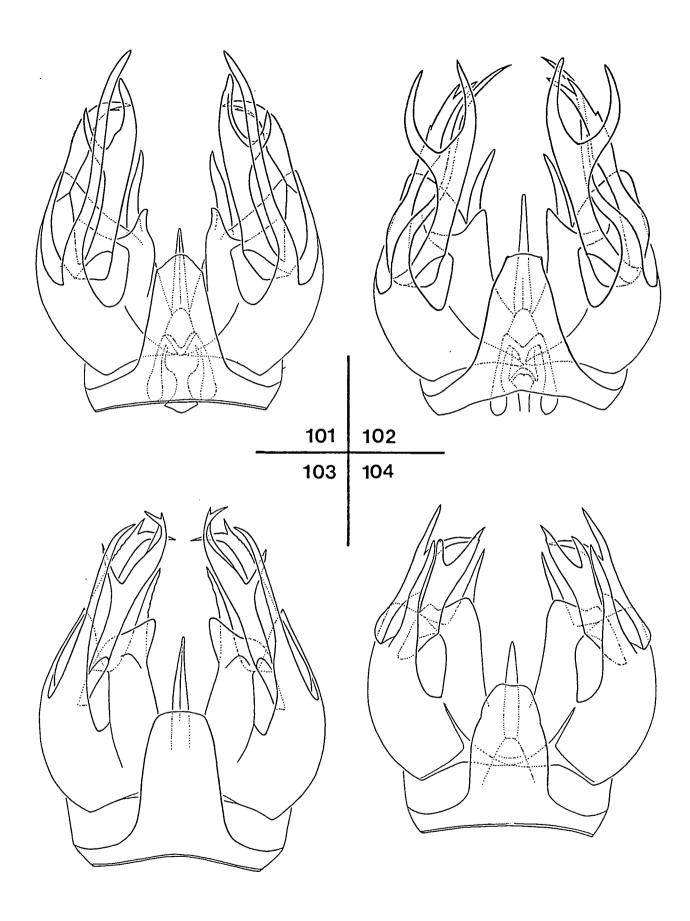
Figs 89-92. Molophilus (Molophilus): 89, aequistylus Alex.; 90, drepanostylus Alex. (simplified from Alexander 1934); 91, tenuiclavus Alex.; 92, pita sp. n.



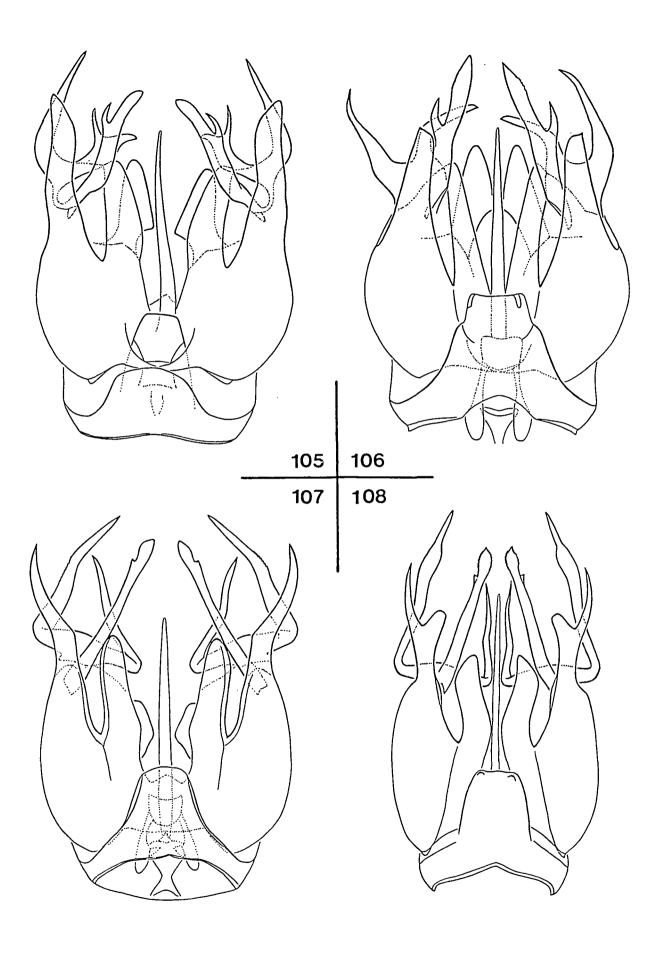
 $Figs\,93-96.\,Molophilus\,(Molophilus):\,93, difficilis\,\,ALEX.;\,94, exsertus\,\,ALEX.;\,95, spiculistylatus\,\,ALEX.;\,96, insertus\,sp.n.$



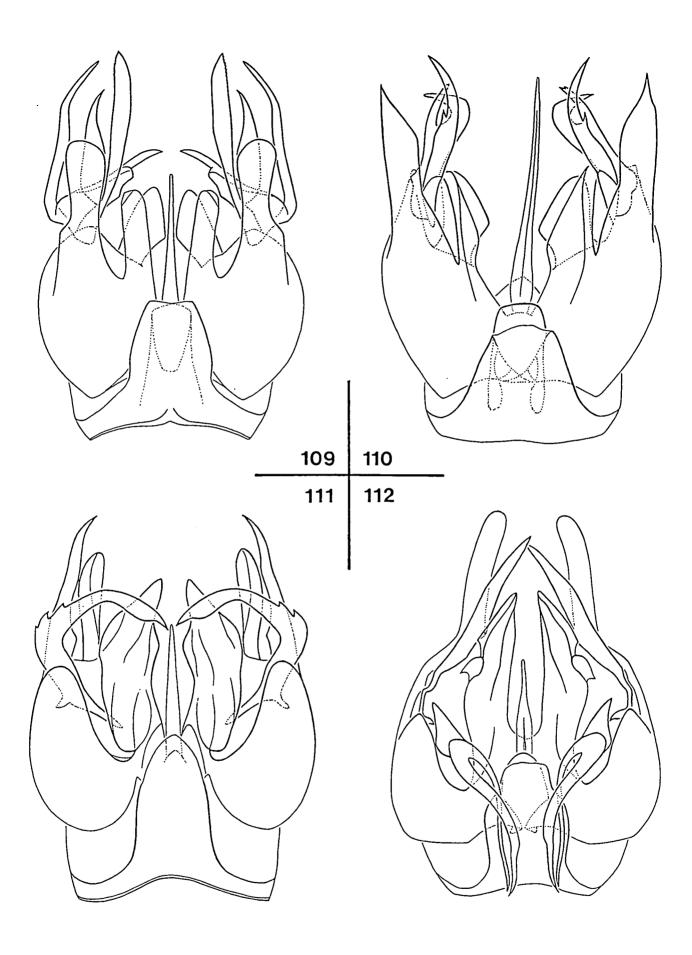
Figs 97-100. Molophilus (Molophilus): 97, megacanthus Alex.; 98, wadna sp. n.; 99, horridus Alex.; 100, subhorridus Alex.



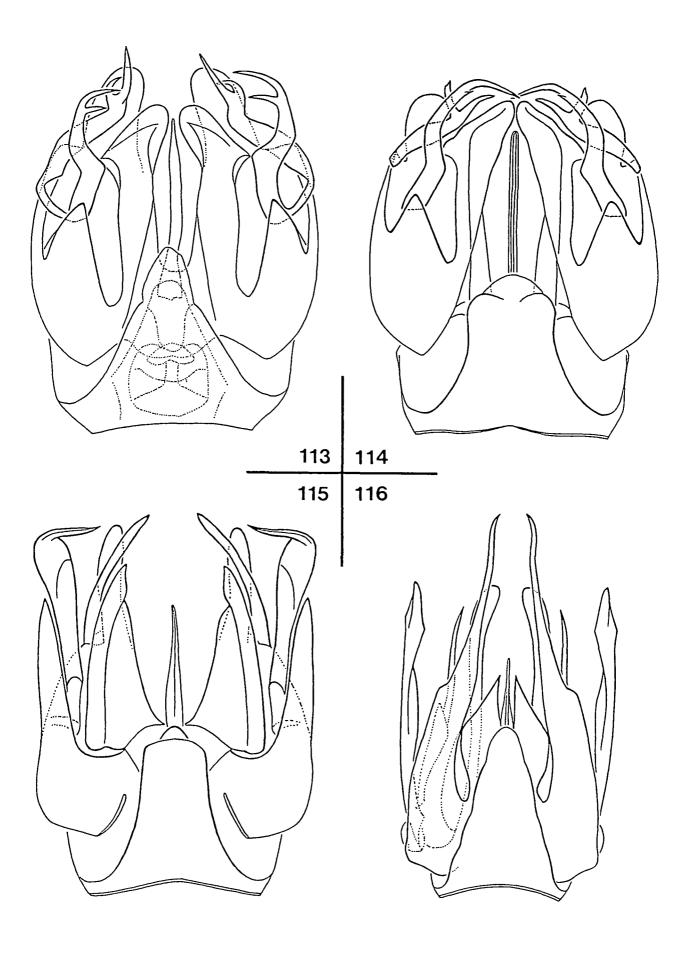
Figs 101-104. Molophilus (Molophilus): 101, fergusonianus Alex.; 102, karta sp. n.; 103, gracilis Skuse; 104, multispicatus Alex.



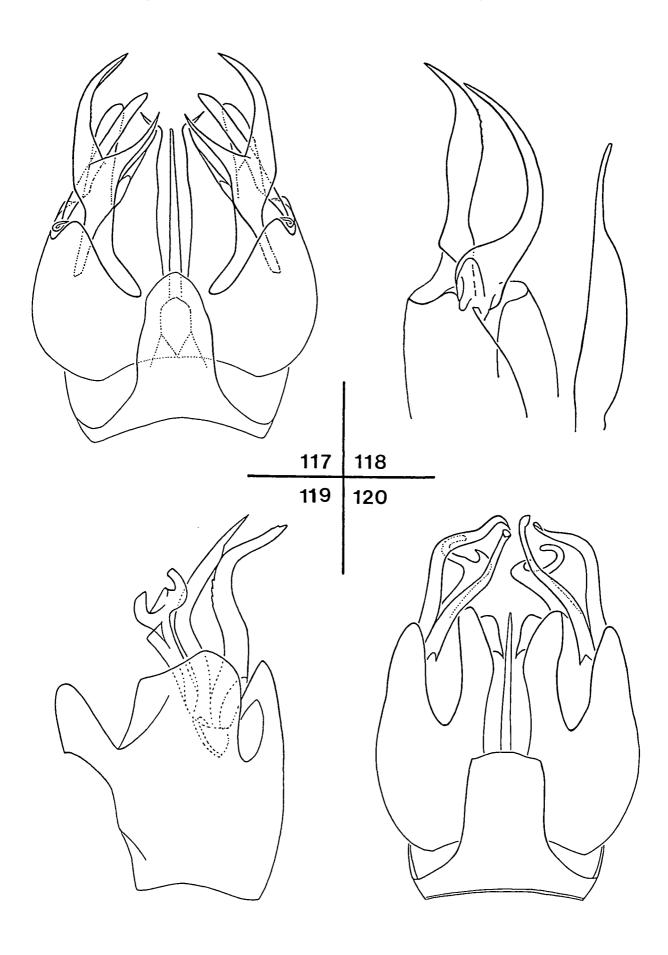
Figs 105-108. Molophilus (Molophilus): 105, extricatus Alex.; 106, morulus Alex.; 107, reductus Alex.; 108, verticalis Alex.



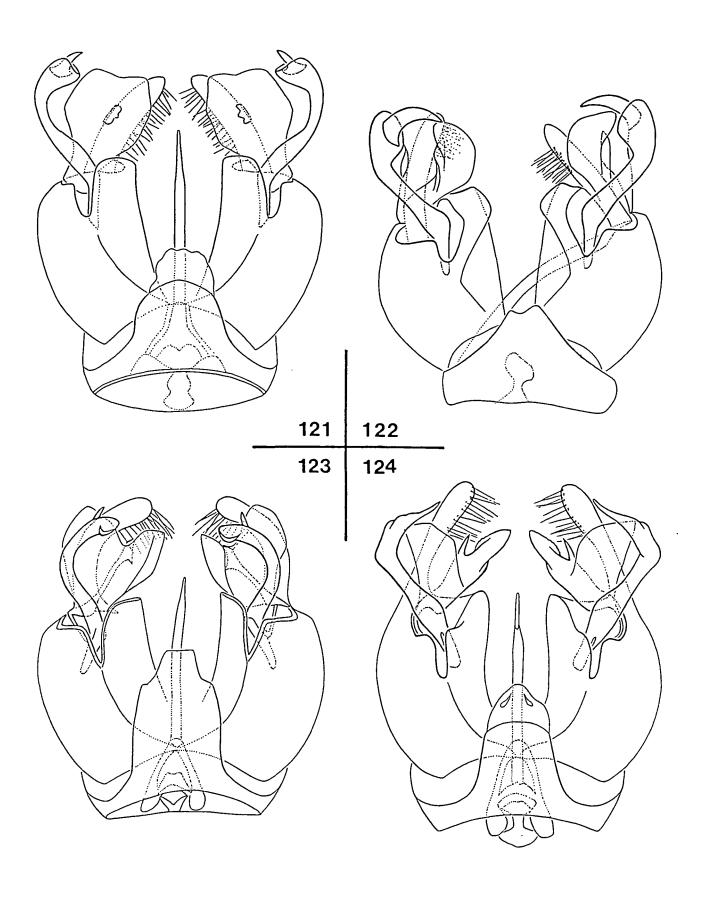
 $Figs 109-112. \textit{Molophilus} (\textit{Molophilus}): 109, \textit{christine} \ \texttt{Thei.}; 110, \textit{vulpinus} \ \texttt{Alex.}; 111, \textit{aphanta} \ \texttt{Alex.}; 112, \textit{dobrotworskyi} \\ \texttt{sp. n.}$



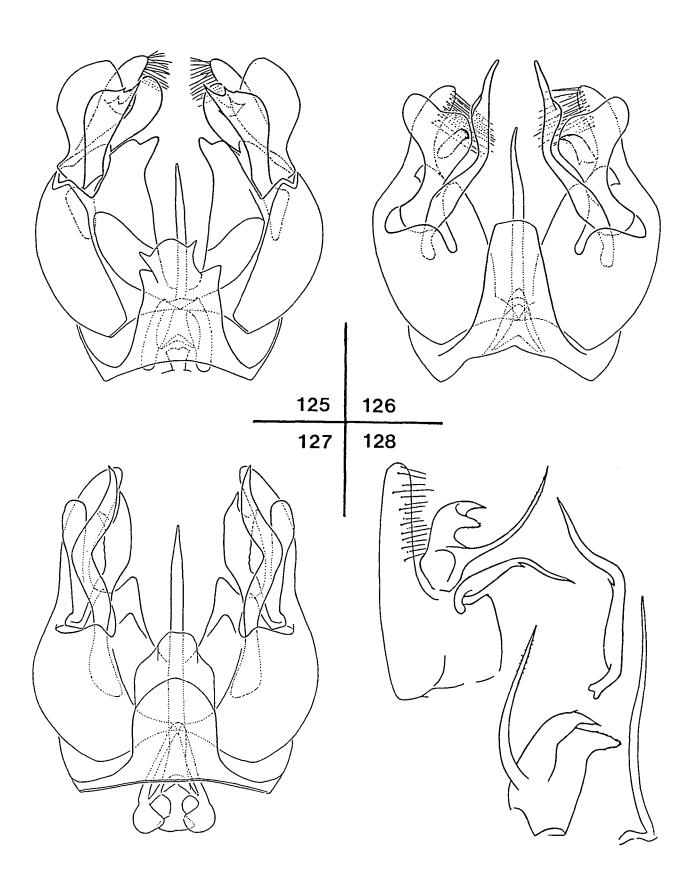
Figs 113-116. Molophilus (Molophilus): 113, paratetrodonta sp. n.; 114, tetrodonta ALEX.; 115, aciferus ALEX.; 116, bawbawiensis ALEX.



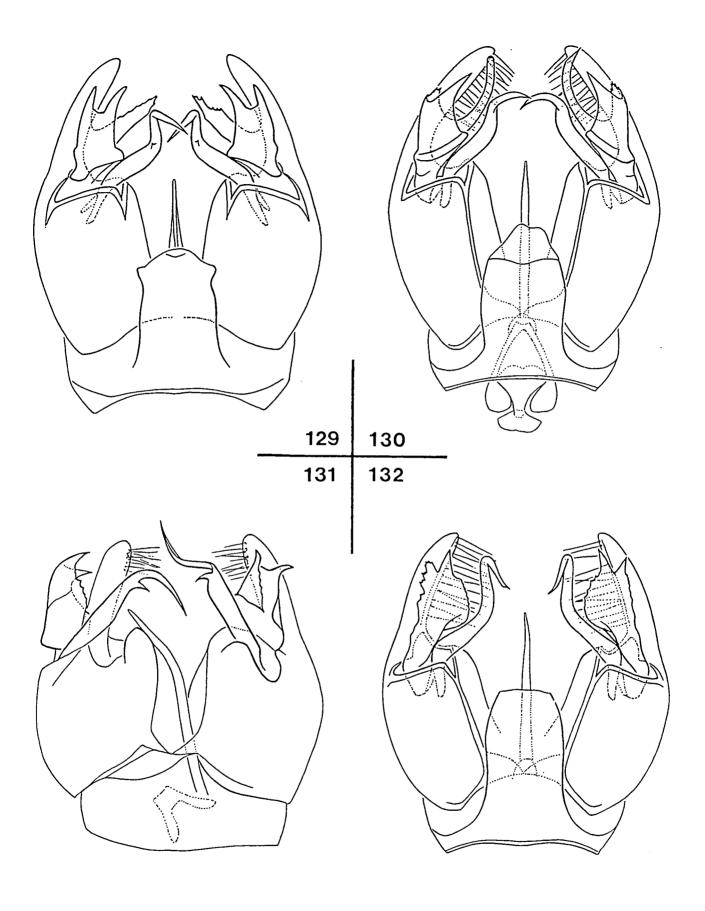
Figs 117-120. Molophilus (Molophilus): 117, forceps ALEX.; 118, mancus ALEX. (ventral aspect, simplified from ALEXANDER 1944); 119, grampianus ALEX. (parts from holotype slide); 120, tristylus ALEX.



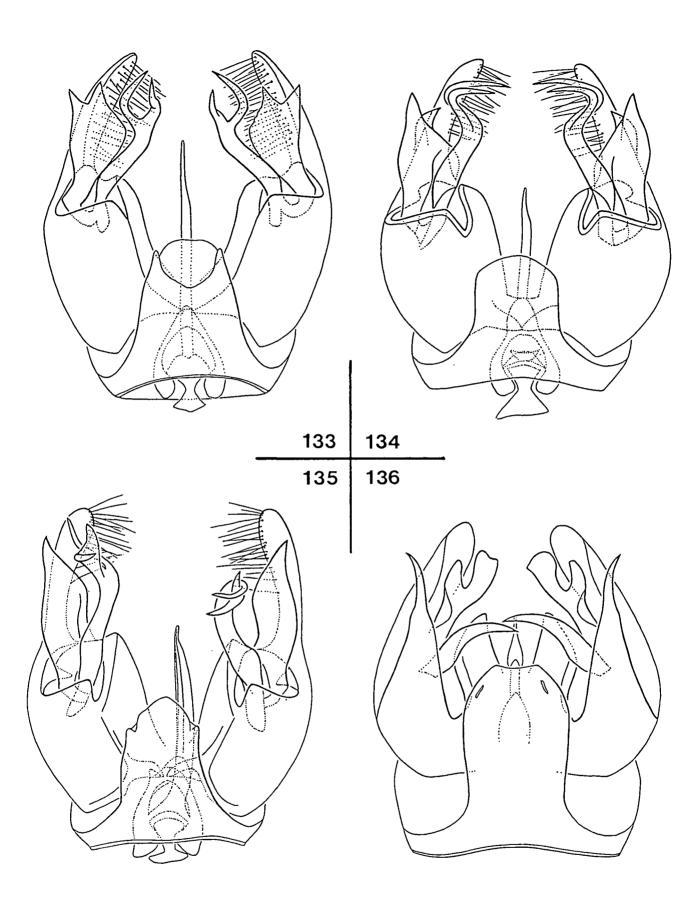
Figs 121-124. Molophilus (Molophilus): 121, auriculifer Thei.; 122, unispinosus Alex. (from holotype slide); 123, maigamaigawa sp. n.; 124, bubbera sp. n.



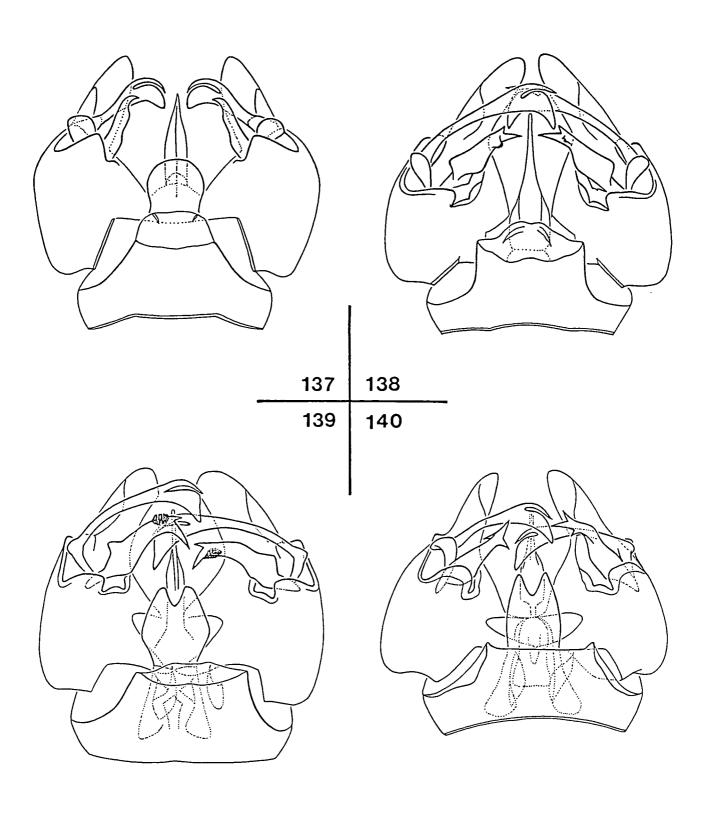
Figs 125-128. Molophilus (Molophilus): 125, tripectinatus Alex.; 126, sigma Alex.; 127, multicurvatus Thei.; 128, capitatus Alex. (simplified from Alexander 1978).



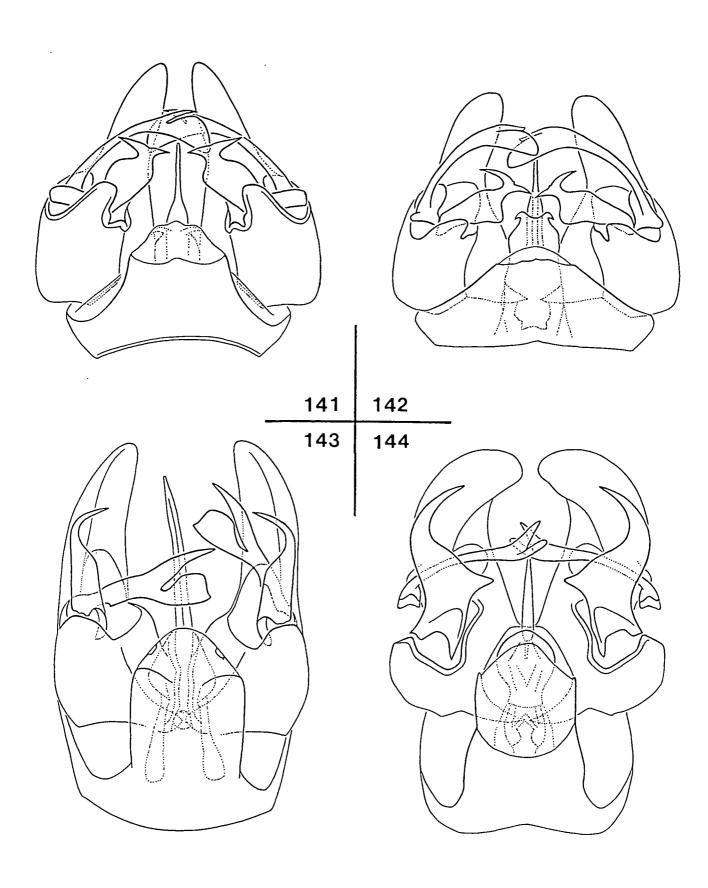
Figs 129-132. Molophilus (Molophilus): 129, 130, ?capitatus ALEX.; 131, poliocophalus ALEX. (from holotype slide); 132, gununo sp. n.



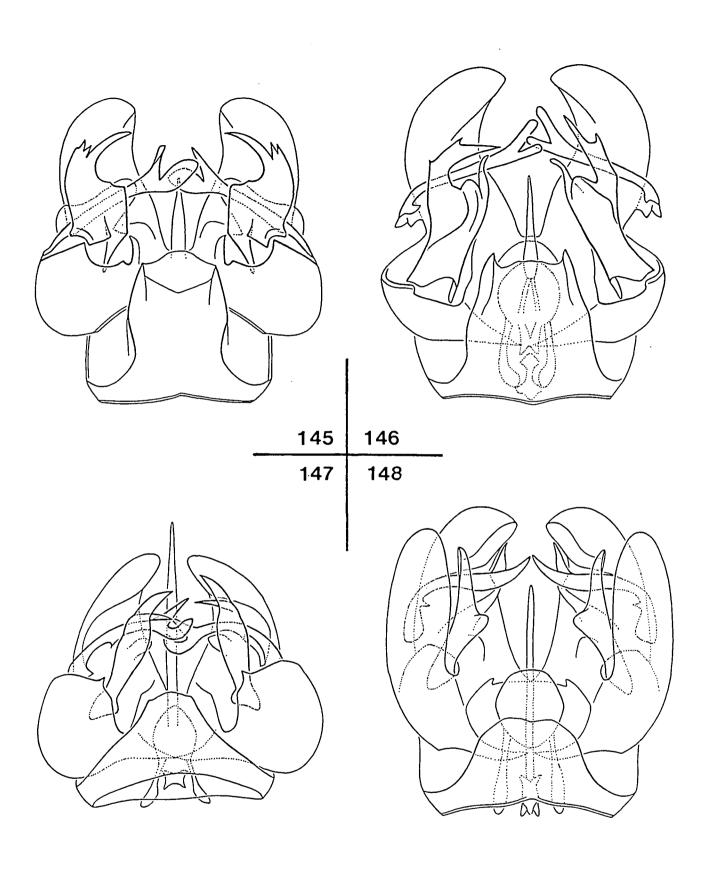
Figs 133-136. Molophilus (Molophilus): 133, mattina sp. n.; 134, yabbie sp. n.; 135, perserenus Alex.; 136, suavis Alex.



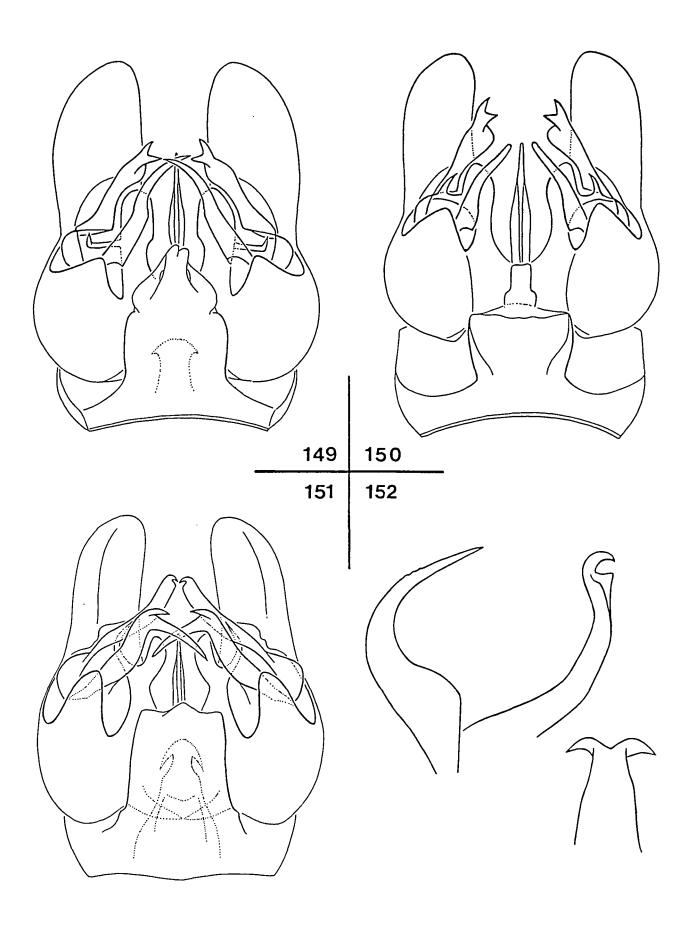
Figs 137-140. Molophilus (Molophilus): 137, chloris Alex.; 138, 139, subalpicola Alex.; 140, trispinosus sp. n.



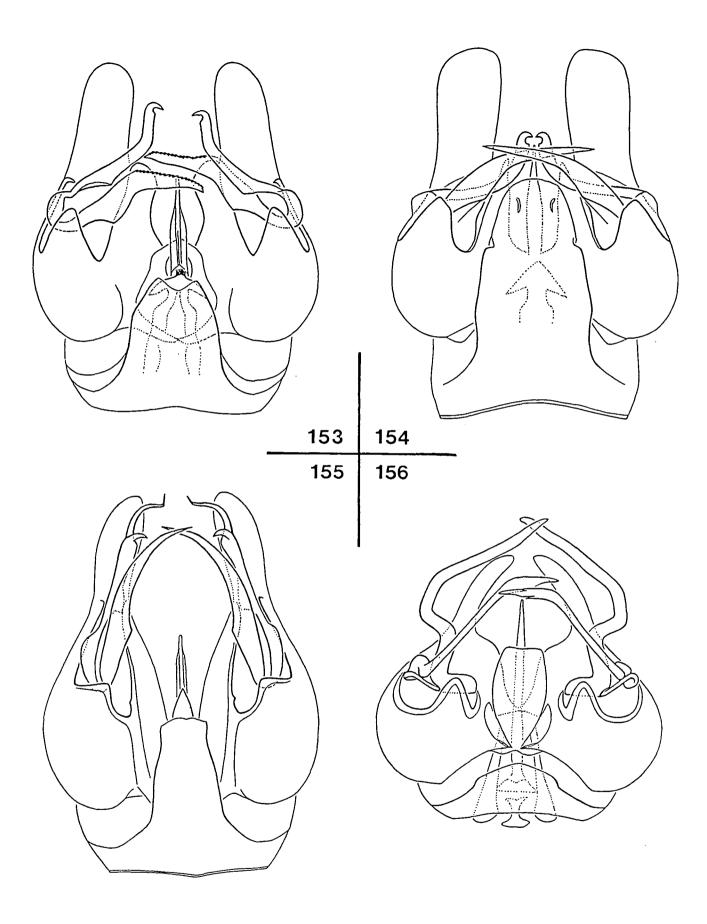
Figs 141-144. Molophilus (Molophilus): 141, annexus ALEX.; 142, ruficollis Skuse; 143, amiculus ALEX.; 144, dorriganus ALEX.



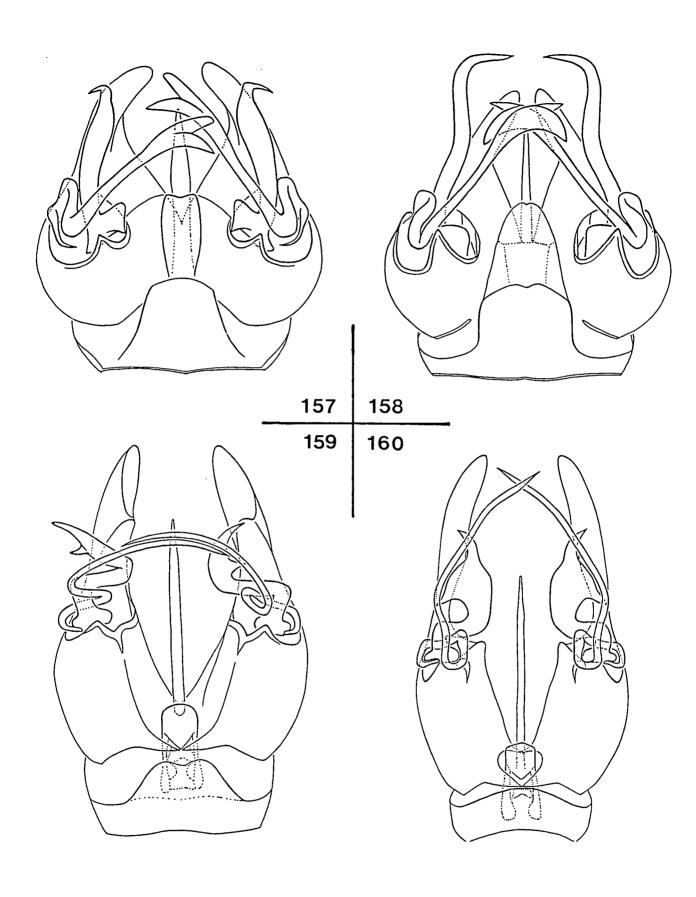
Figs 145-148. Molophilus (Molophilus): 145, macleayanus ALEX; 146, variistylus ALEX.; 147, iluka sp. n.; 148, dorsolobatus Thei.



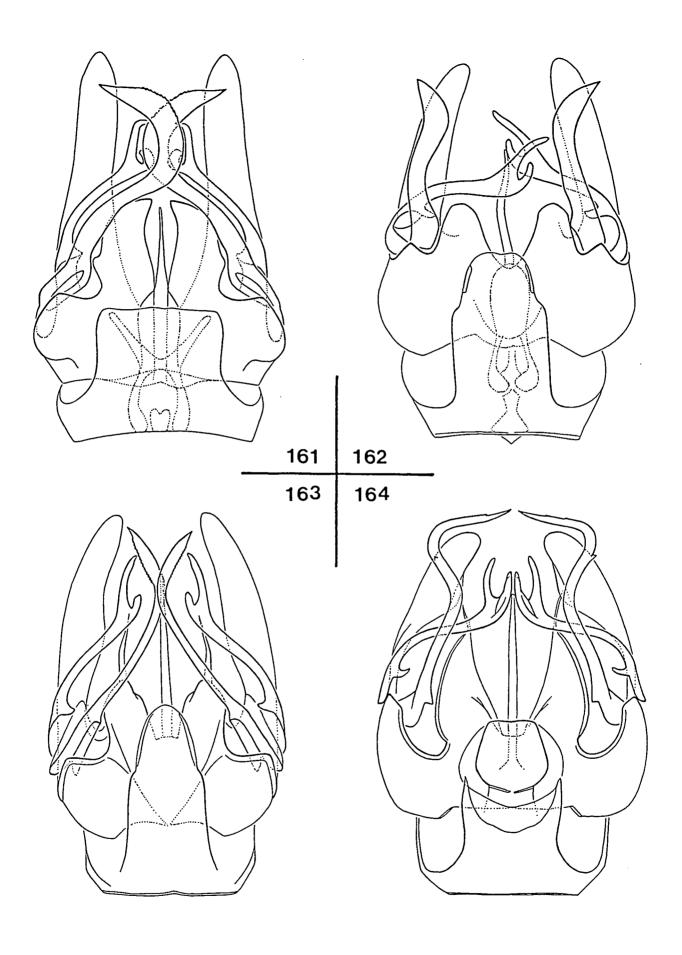
Figs 149-152. Molophilus (Molophilus): 149, apricus ALEX.; 150, congregatus ALEX.; 151, immutatus ALEX.; 152, praelatus ALEX. (parts from holotype slide).



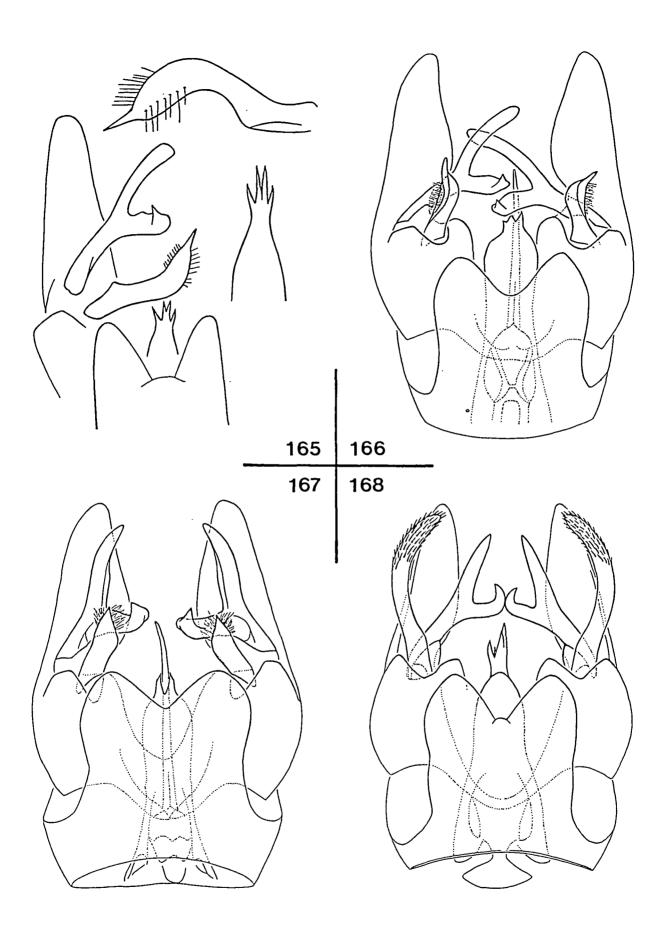
Figs 153-156. Molophilus (Molophilus): 153, permutatus Alex.; 154, pictor Alex.; 155, cerberus Alex.; 156, mjobergi Alex.



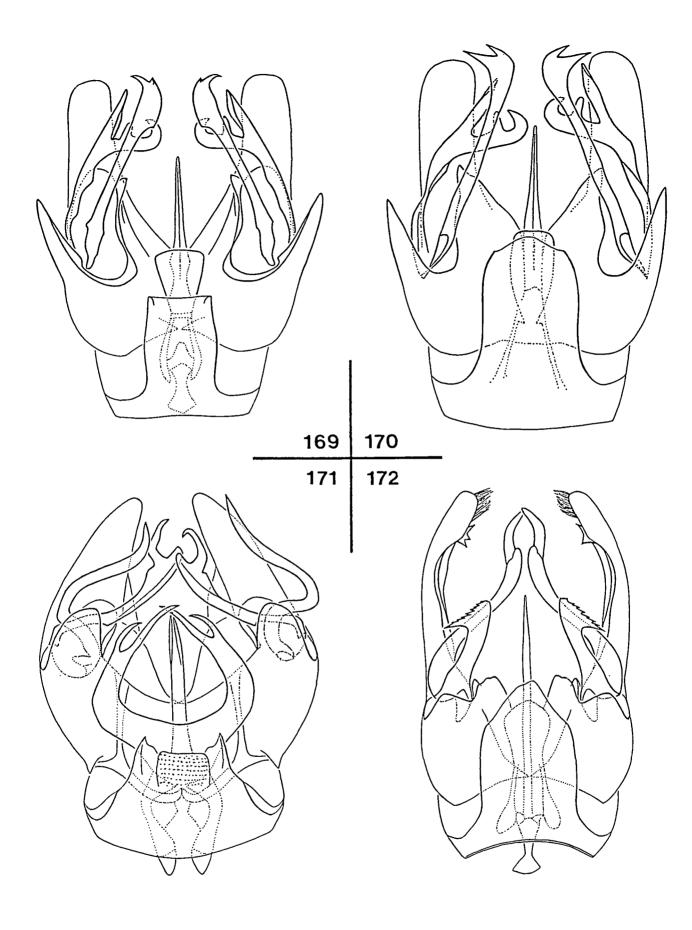
Figs 157-160. Molophilus (Molophilus): 157, opulus Alex.; 158, vividus Alex.; 159, ampliatus Alex.; 160, lucidipennis Skuse.



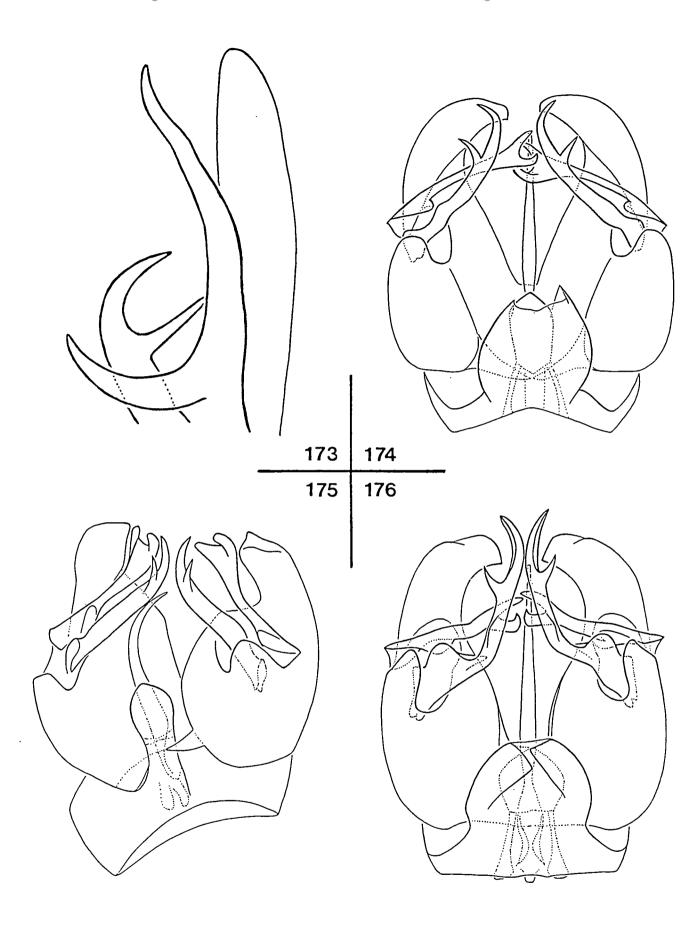
Figs 161-164. Molophilus (Molophilus): 161, erebus Alex.; 162, parerebus sp. n.; 163, scaber Alex.; 164, strix Alex.



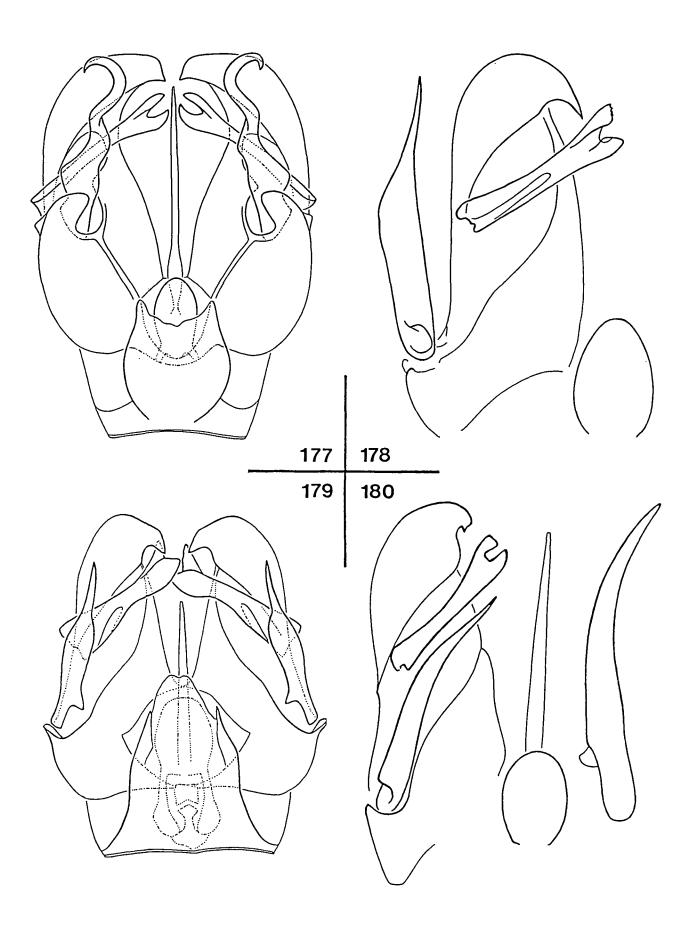
Figs 165-168. Molophilus (Molophilus): 165, extensicornis Alex. (simplified from Alexander 1944); 166, tasioceroides Alex.; 167, maroondah sp. n.; 168, wilsoni Alex.



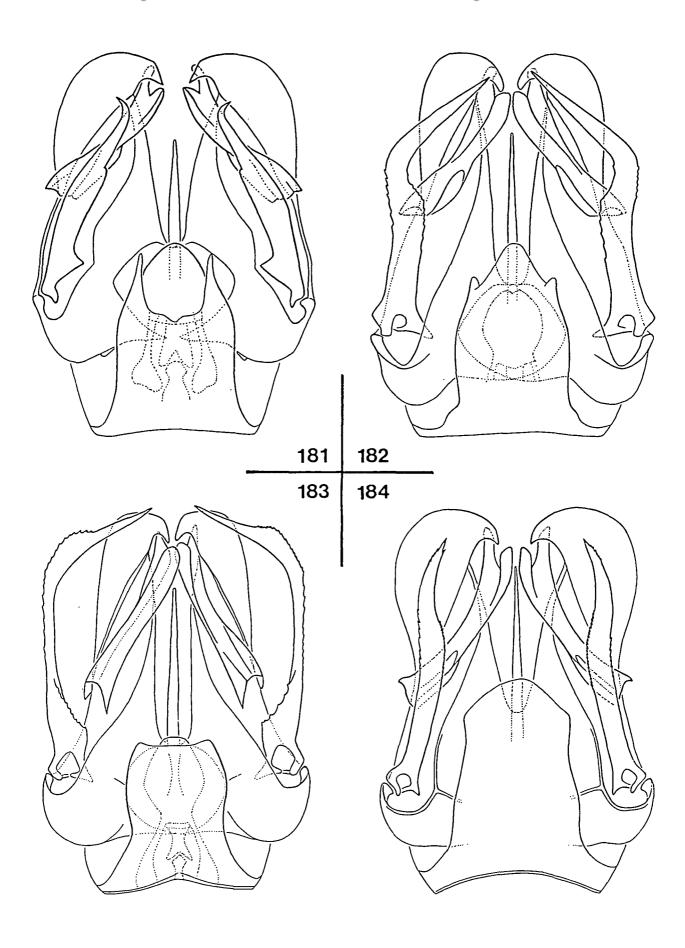
Figs 169-172. Molophilus (Molophilus): 169, expansus ALEX.; 170, trigonalis ALEX.; 171, riawunna sp. n.; 172, bunyipensis ALEX.



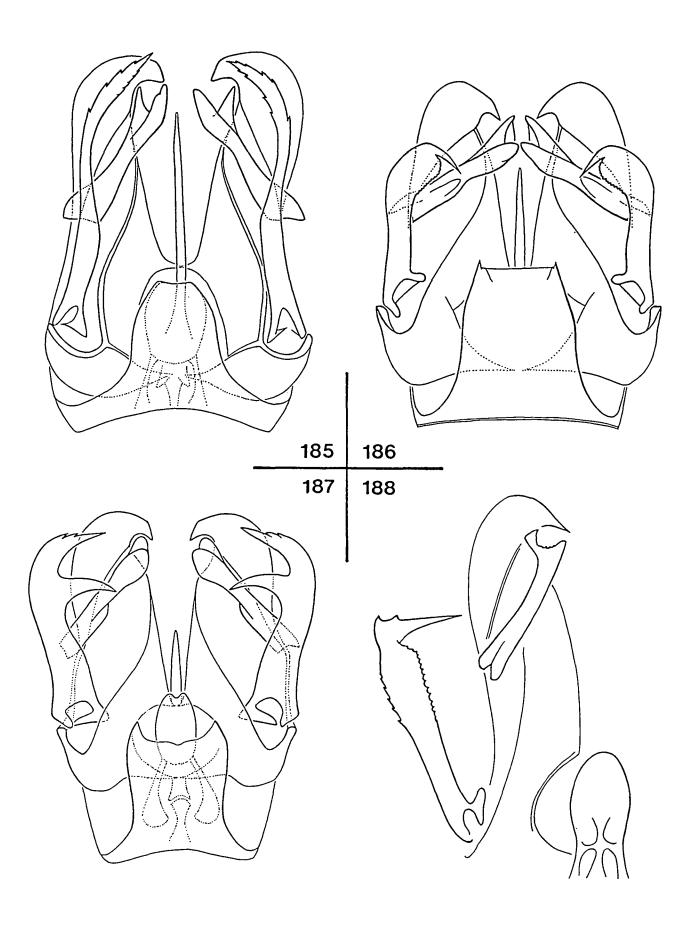
Figs 173-176. Molophilus (Molophilus): 173, rasilis ALEX. (parts, from holotype slide); 174, adamantinus ALEX.; 175, exiguus ALEX. (from holotype slide); 176, atnaterta sp. n.



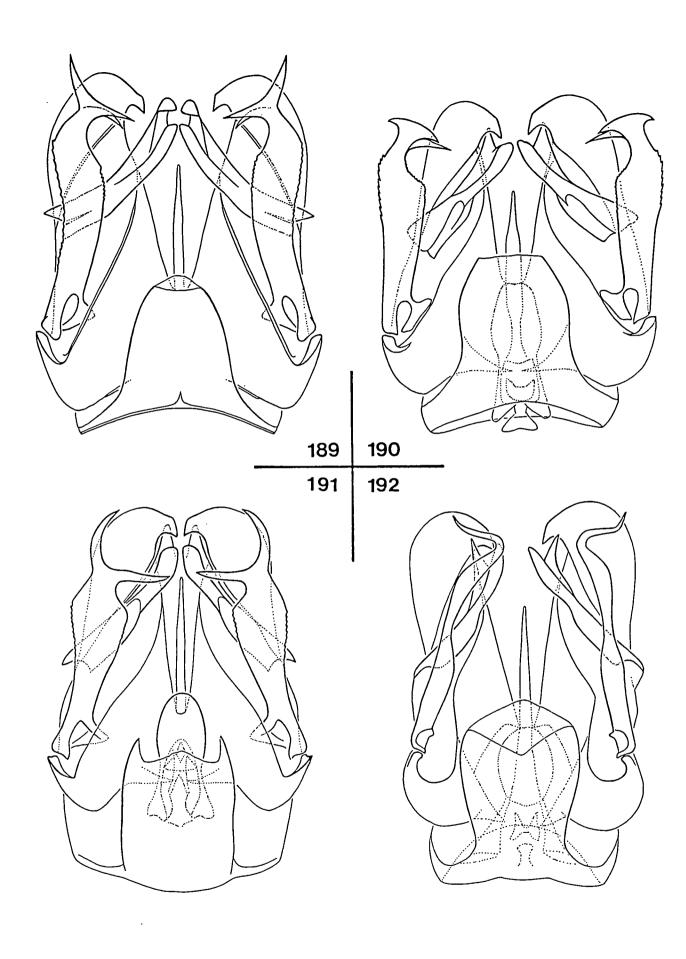
Figs 177-180. Molophilus (Molophilus): 177, janus Alex.; 178, abitus Alex. (simplified from Alexander 1944); 179, ?abitus Alex.; 180, fusiformis Alex. (simplified from Alexander 1934).



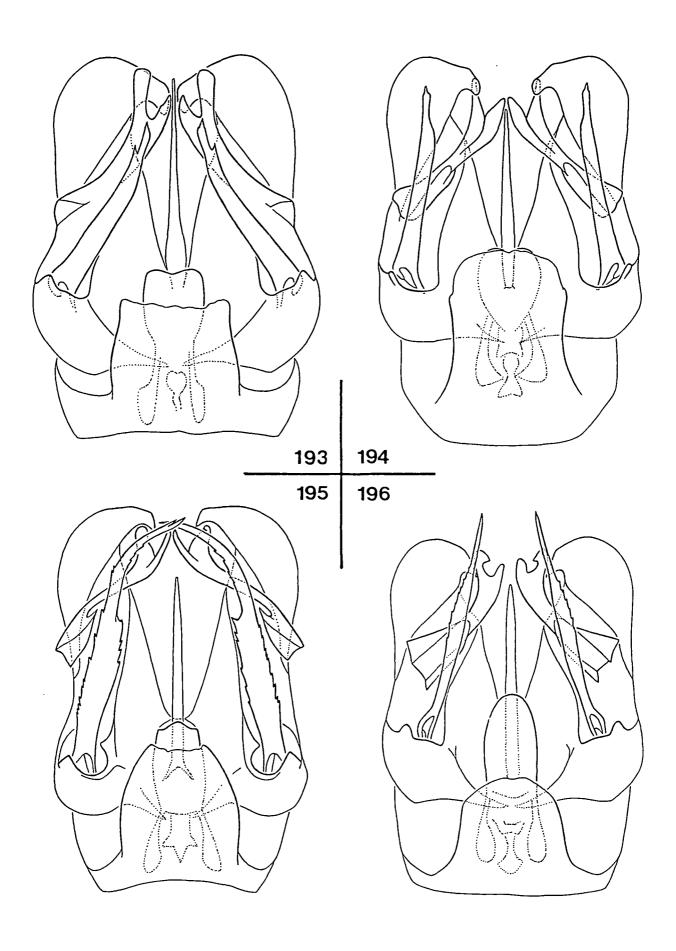
Figs 181-184. Molophilus (Molophilus): 181, williamsi sp. n.; 182, acutissimus Thel.; 1983, binnaburra Thel.; 184, mirla sp. n.



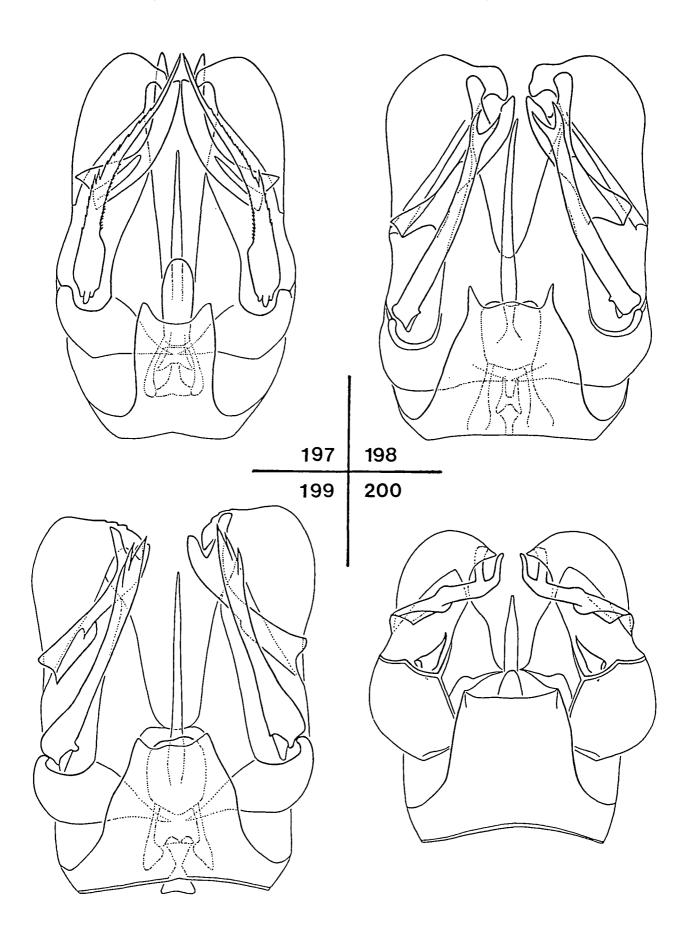
Figs 185-188. Molophilus (Molophilus): 185, tuta sp. n.; 186, kutha sp. n.; 187, longioricornis Alex.; 188, eboracensis Alex. (simplified from Alexander 1944).



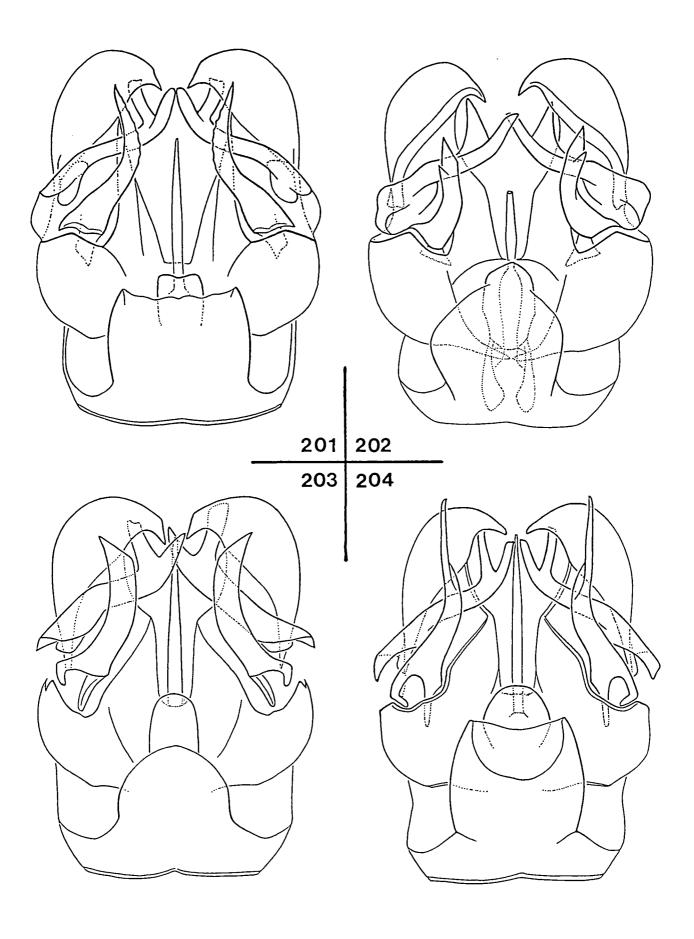
Figs 189-192. Molophilus (Molophilus): 189, akama sp. n.; 190, willara sp. n.; 191, kaandha sp. n.; 192, furvus Alex.



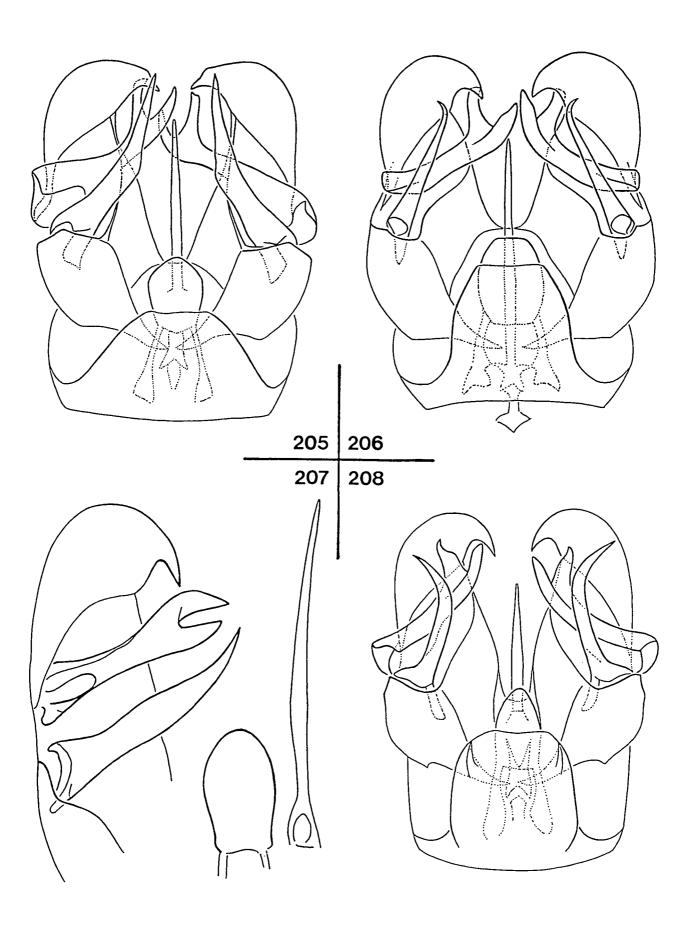
Figs 193-196. Molophilus (Molophilus): 193, flavidellus Alex.; 194, kama sp. n.; 195, femoratus Skuse; 196, filistylus Alex.



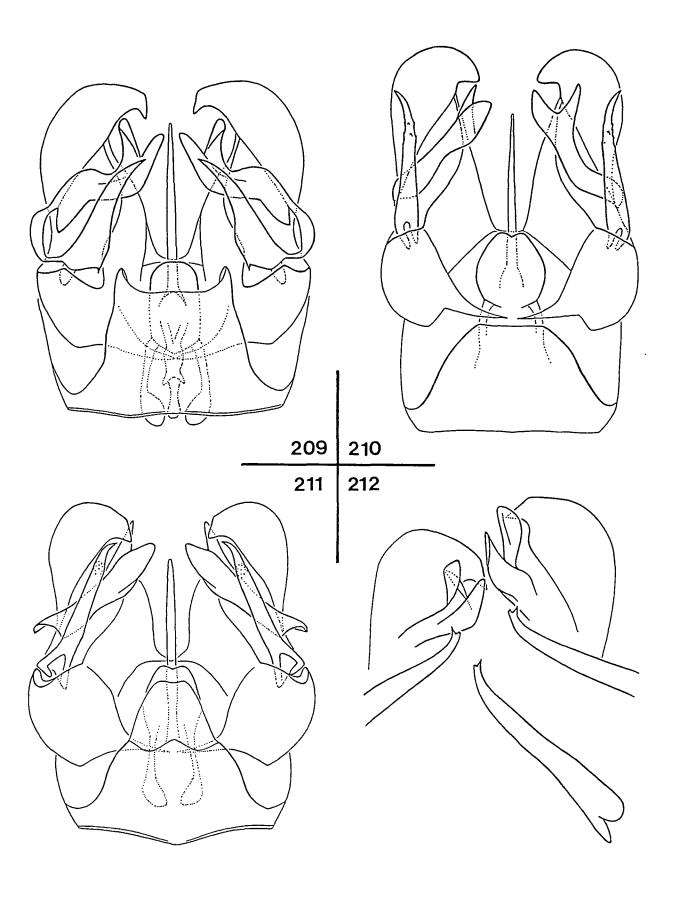
Figs 197-200. Molophilus (Molophilus): 197, militaris ALEX.; 198, bilyarra sp. n.; 199, ternatus ALEX.; 200, parvistylus ALEX.



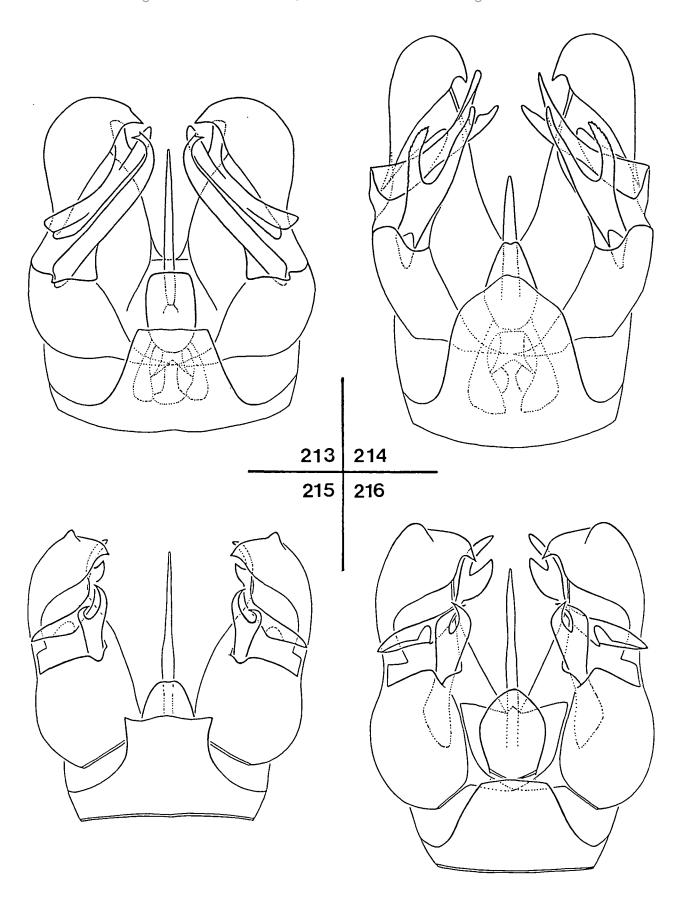
 $Figs \, 201\text{-}204. \, \textit{Molophilus} \, (\textit{Molophilus}) : 201, \textit{arcuarius} \, \text{Alex.}; 202, \textit{bogongensis} \, \text{Alex.}; 203, \textit{hollowayi} \, \text{Thei.}; 204, \textit{keda} \, \text{sp. n.}$



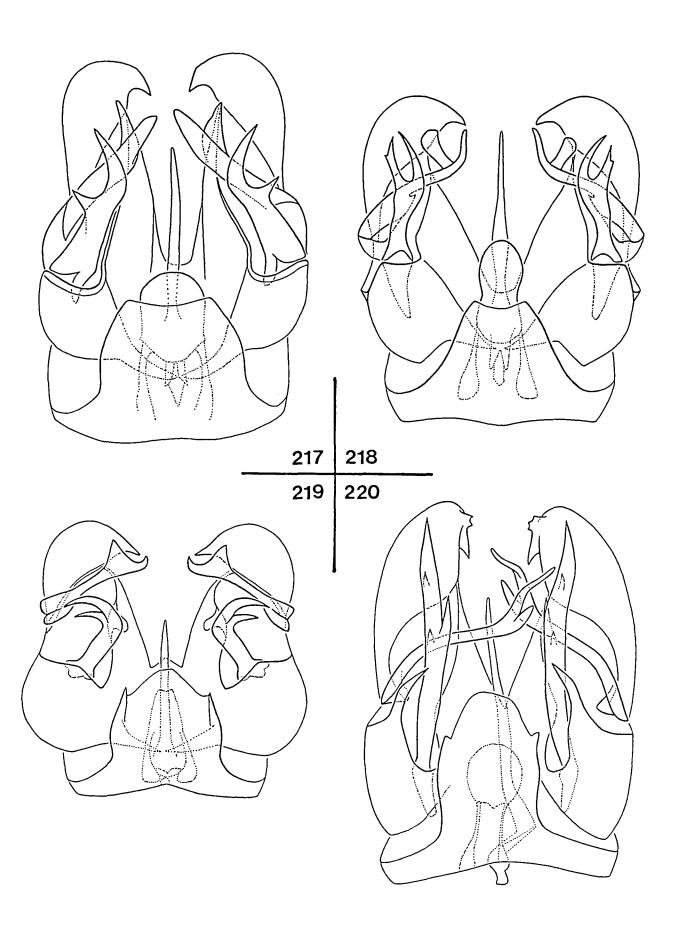
Figs 205-208. Molophilus (Molophilus): 205, warroo sp. n.; 206, worraworra sp. n.; 207, laevistylus Alex. (simplified from Alexander 1944); 208, padmuri sp. n.



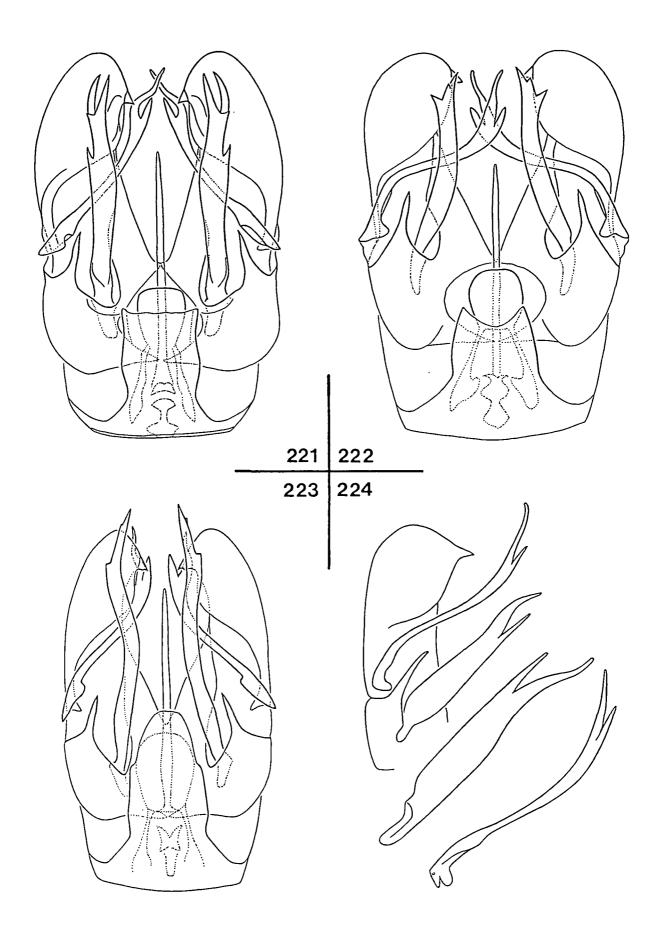
Figs 209-212. Molophilus (Molophilus): 209, gilvus Alex.; 210, womba sp. n.; 211, zenta Thei.; 212, pauperculus Alex. (parts, from holotype slide).



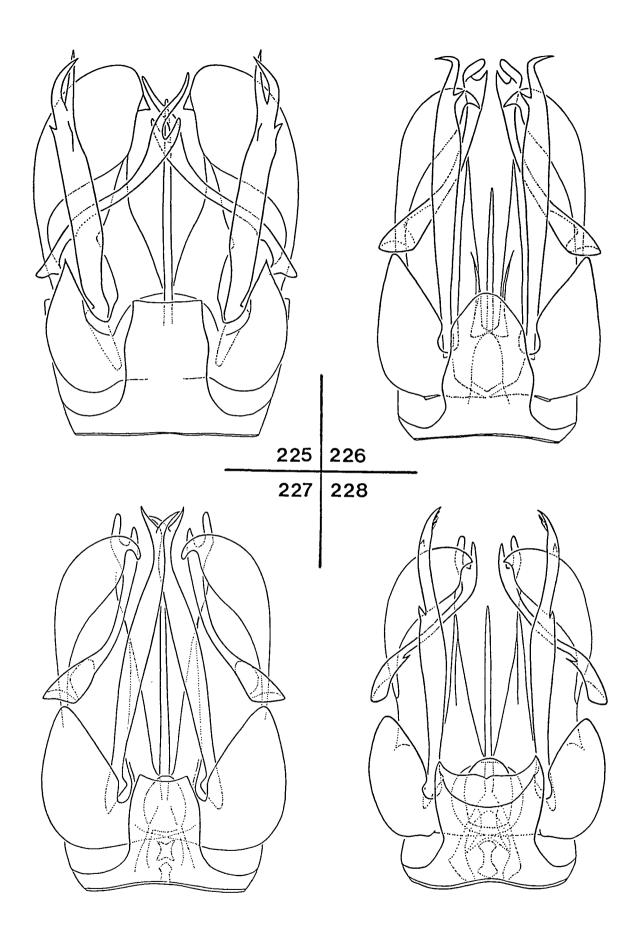
 $Figs\,213-216.\,\textit{Molophilus}\,(\textit{Molophilus}):\,213,\textit{perluteolus}\,\,\text{Alex.};\,214,\textit{barretti}\,\,\text{Alex.};\,215,\textit{biaga}\,\,\text{sp.\,n.};\,216,\textit{mackerrasi}\,\,\text{Alex.};\,214,\textit{barretti}\,\,\text{Alex.};\,215,\textit{biaga}\,\,\text{sp.\,n.};\,216,\textit{mackerrasi}\,\,\text{Alex.};\,216,\textit{biaga}\,\,\text{sp.\,n.};\,216,\textit{b$



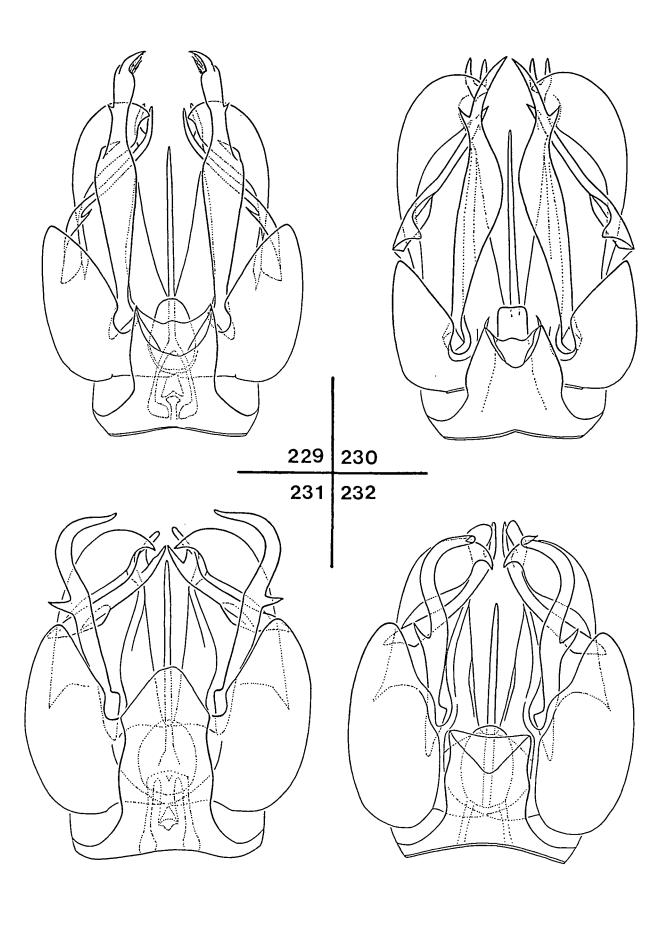
Figs 217-220. Molophilus (Molophilus): 217, beri sp. n.; 218, duplex ALEX.; 219, electus ALEX.; 220, annulipes Skuse (from holotype slide).



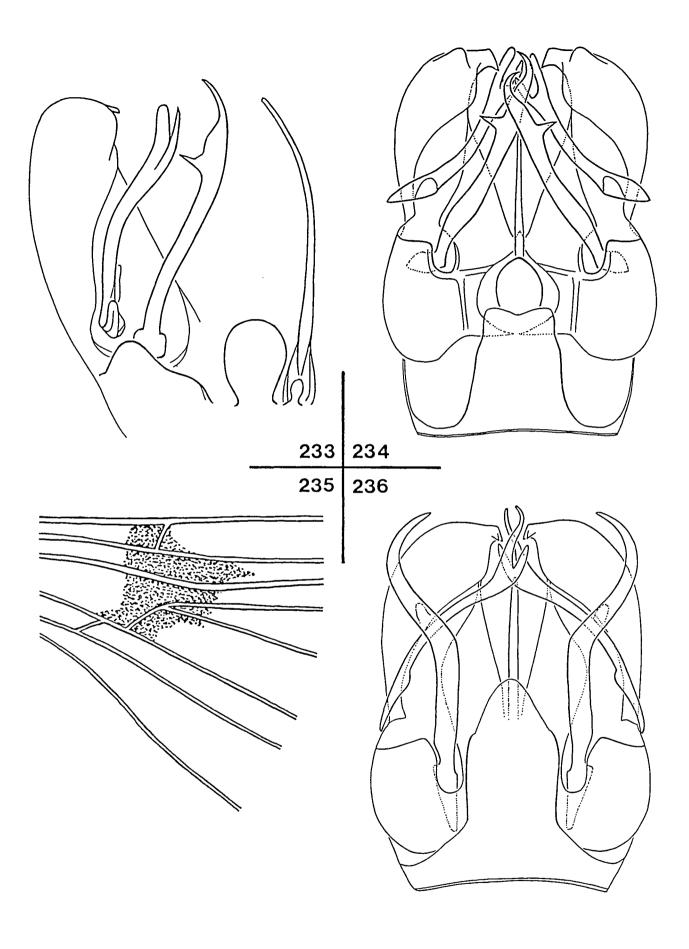
Figs 221-224. Molophilus (Molophilus): 221, persimilis Alex.; 222, cingulipes Alex.; 223, nerriga sp. n.; 224, subannulipes Alex. (simplified from Alexander 1978).



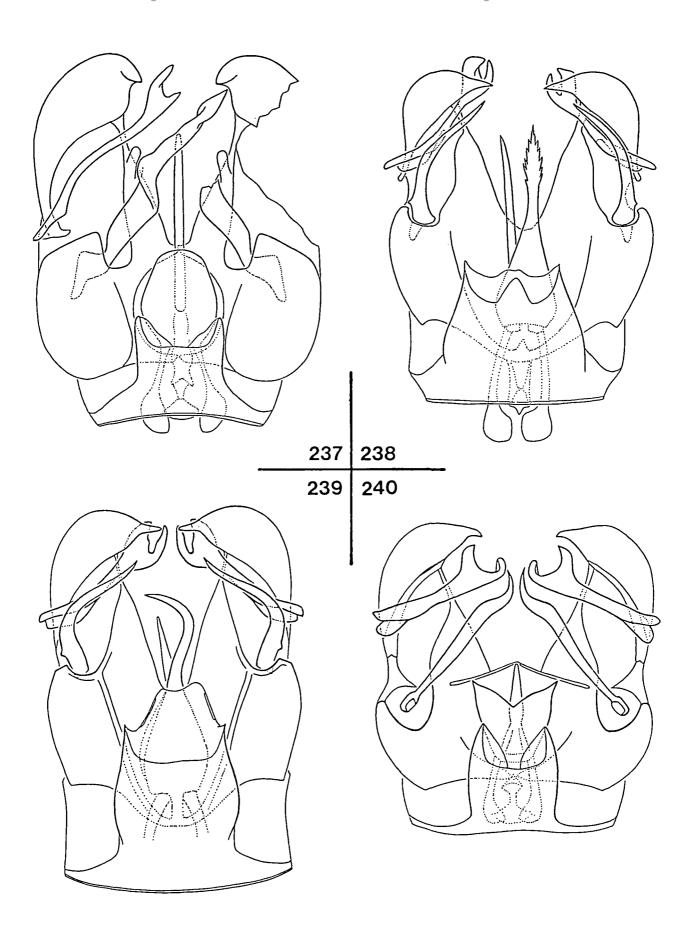
Figs 225-228. Molophilus (Molophilus): 225, obliteratus Alex.; 226, gemellus Alex.; 227, longifurcatus Thei.; 228, flavonotatus Skuse.



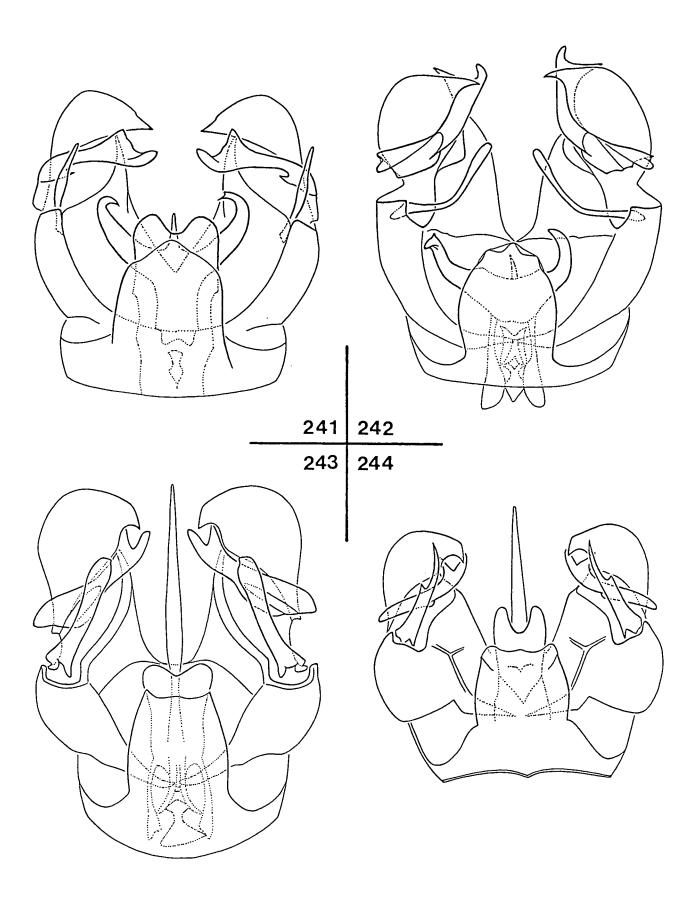
Figs 229-232. Molophilus (Molophilus): 229, parannulipes sp. n.; 230, tuu sp. n.; 231, indivisus Alex.; 232, occidentalis Thei.



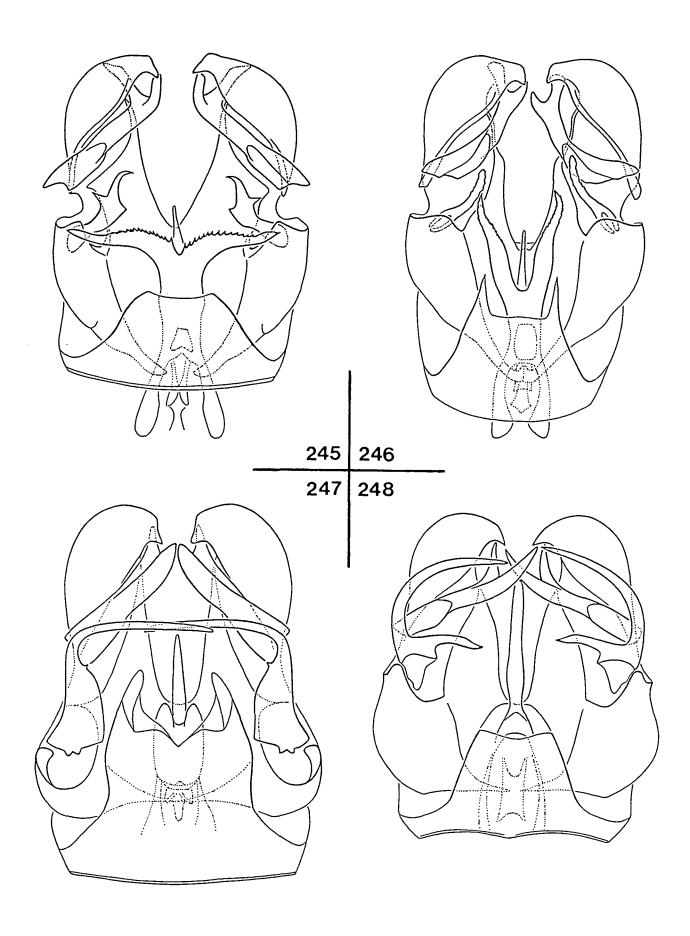
Figs 233-236. Molophilus (Molophilus): 233, perpendicularis Alex. (simplified from Alexander 1944); 234, waukatte sp. n.; 235, eurygramma Alex. (part of wing, from holotype slide); 236, mouldsi Thei.



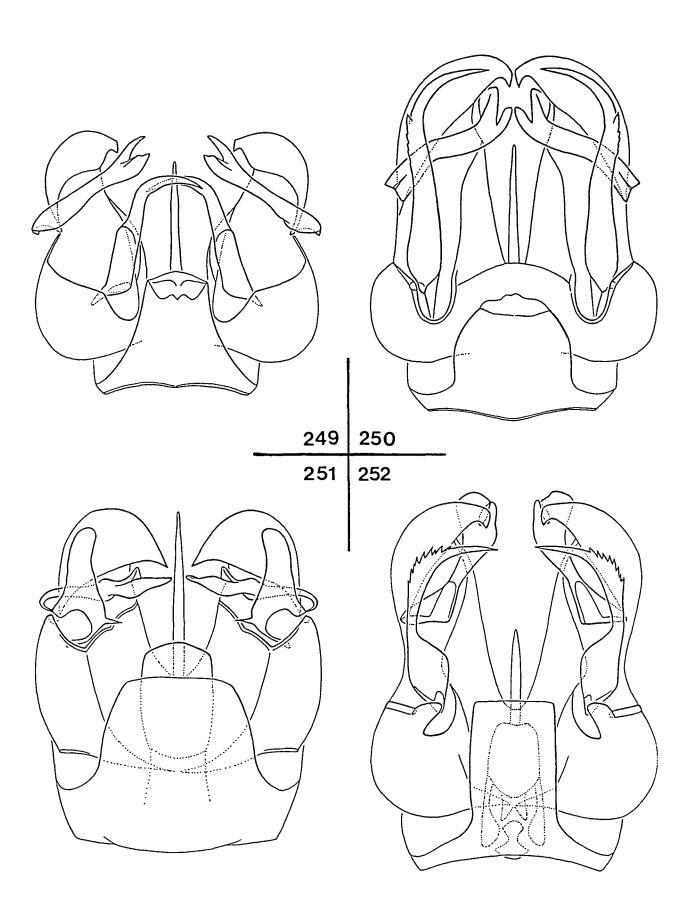
Figs 237-240. Molophilus (Molophilus): 237, vallisspei Thel.; 238, danielsi Thel.; 239, longicornis Skuse; 240, errabunga sp. n.



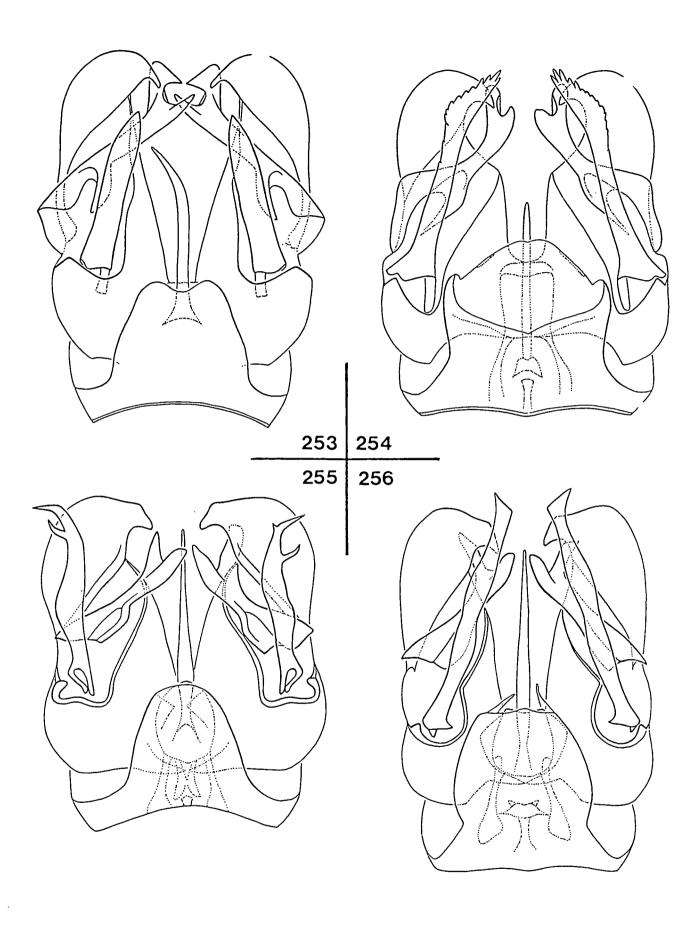
Figs 241-244. Molophilus (Molophilus): 241, distinctissimus Alex.; 242, perdistinctus Alex.; 243, duckhousei sp. n.; 244, plumbeiceps Alex.



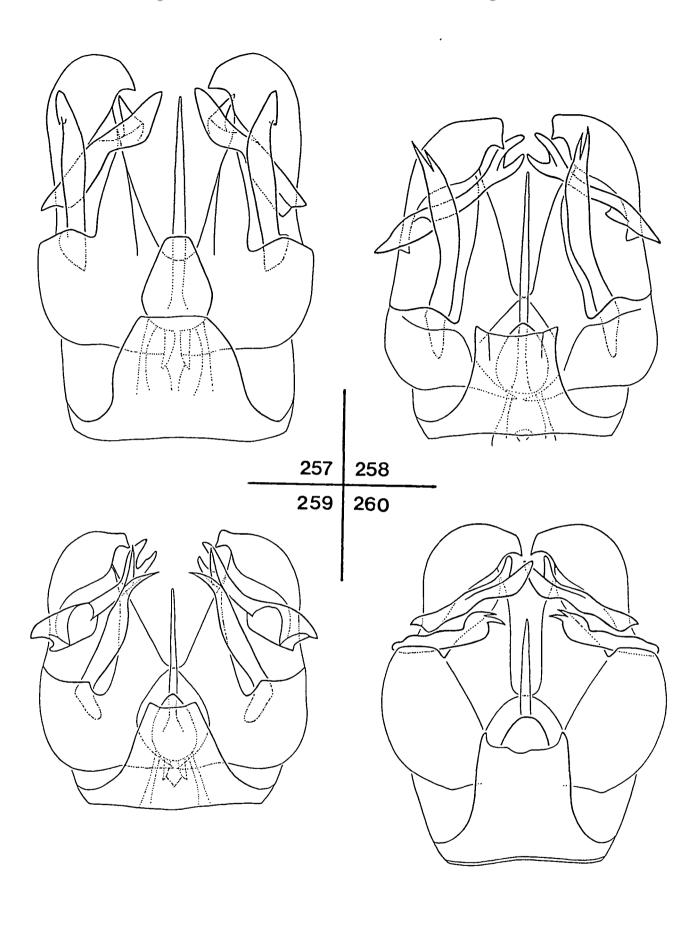
Figs 245-248. Molophilus (Molophilus): 245, mawiliri sp. n.; 246, parviserratus Alex.; 247, manjimupensis Thei.; 248, pimelia Thei.



Figs 249-252. Molophilus (Molophilus): 249, macalpinei Thel.; 250, poecilonota Alex.; 251, titania Alex.; 252, translucens Skuse.



Figs 253-256. Molophilus (Molophilus): 253, uniguttatus ALEX.; 254, walpole Thei.; 255, erricha sp. n.; 256, karaka sp.n.



Figs. 257-260. Molophilus (Molophilus): 257, kokora sp. n.; 258, kuniekoondie sp. n.; 259, ulbracullima sp. n.; 260, pengana sp. n.

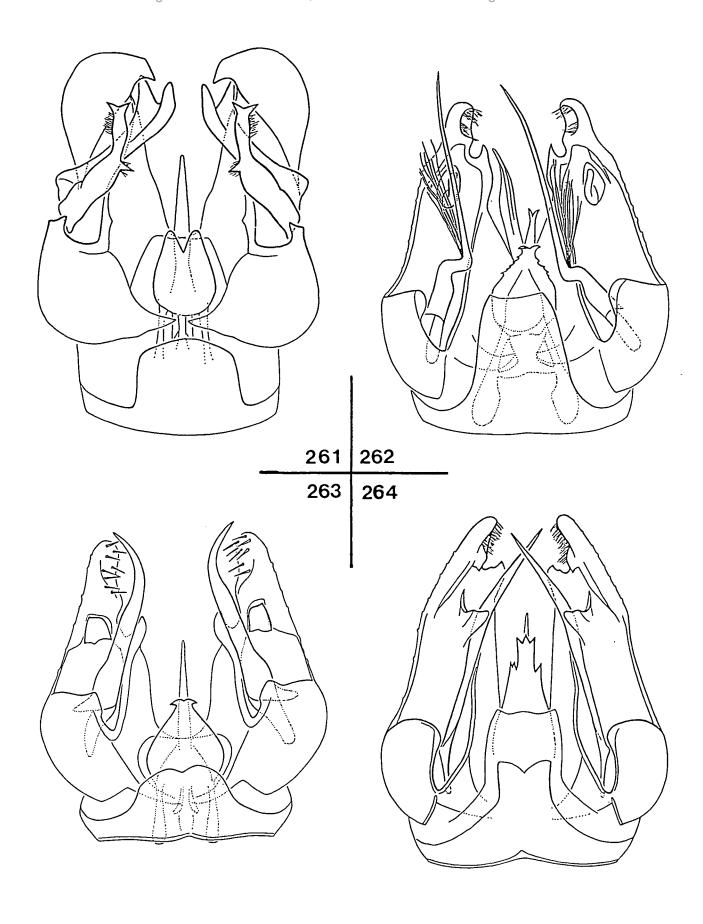
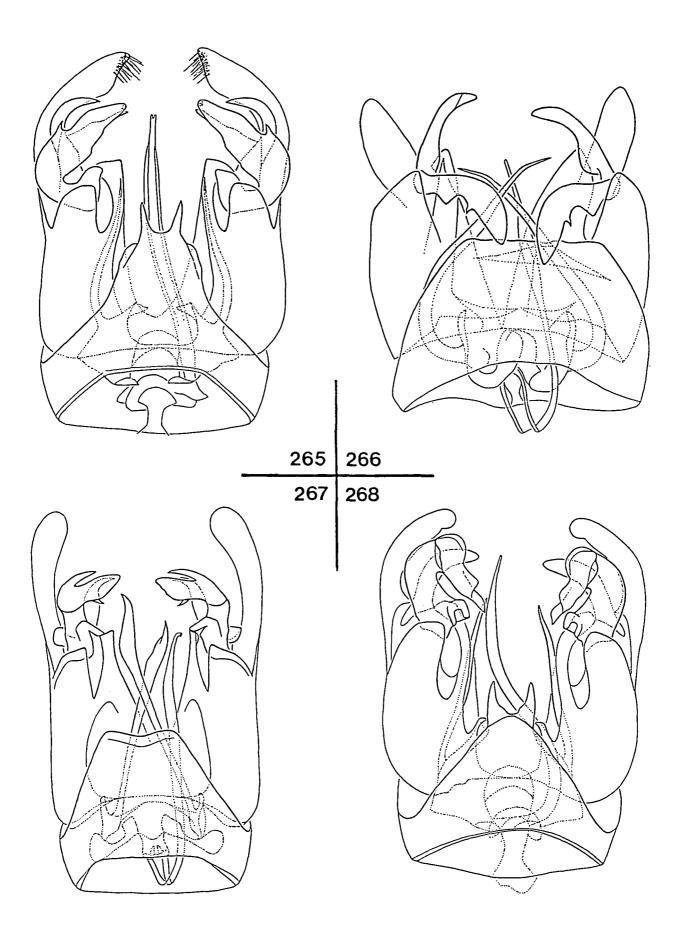
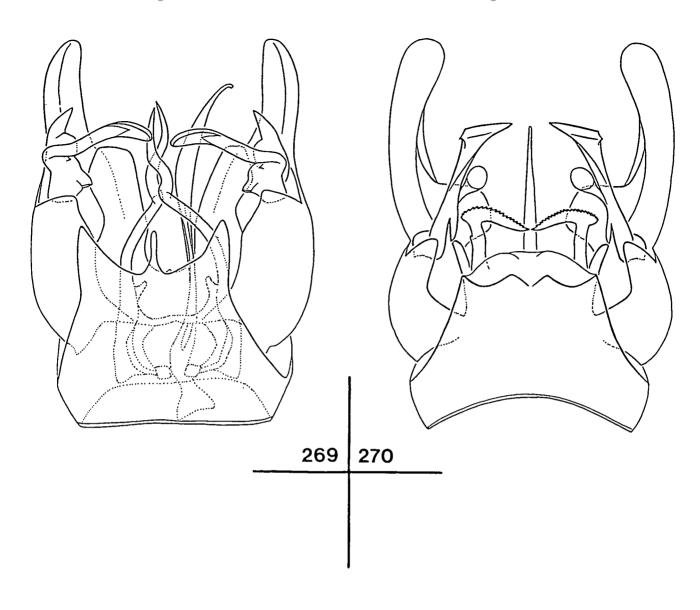


Fig. 261. Molophilus (Molophilus) metpadinga sp. n. Figs 262-264. Molophilus (Onychomolophilus): 262, equisetosus Alex.; 263, piggibilla sp. n.; 264, gidya sp. n.



Figs 265-268. *Molophilus (Superbomolophilus)*: 265, cooloola sp. n.; 266, gigas Alex. (from holotype slide); 267, marriwirra sp. n.; 268, brumby Thei.



Figs 269, 270. Molophilus (Superbomolophilus): 269, froggatti Skuse; 270, kunara sp. n.